

CHAPTER IV

PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA

This chapter includes the presentation, analysis and interpretation of the data received from all the 247 teachers colleges in India upto the year 1965.

For the purpose of preliminary survey all the 247 teachers colleges (1965) were included in the population. Out of these 247 colleges 115 colleges (46.6%) were reported to operate audio-visual education training programme, 93 colleges (37.6%) stated that no such programme was operated by them in any form, and 39 colleges (15.8%) did not respond to the questionnaire at all. For further study along with 115 colleges operating the programme, 39 colleges which did not reply were also included with some hope to receive more data. The total number of colleges was fixed as 154 for the critical study. Out of 154 colleges 79 colleges (51.3%) were operating the audio-visual education

training programme in various forms and 75 colleges (48.7%) did not reply to the questionnaire. It is possible that the programmes operated by the colleges which did not reply may be of quite elementary nature and thus it may not have been possible for them to furnish the data according to the detailed study undertaken by the investigator.

The data are analysed mainly on the three tier sponsorship basis and the types of training programmes conducted by the colleges.

Sponsors of the Audio-Visual Education Programmes

With a view to making the study more critical and comparative, the data of 79 colleges operating audio-visual education training programmes were further analysed according to the sponsorship and the kind of the programmes offered. The analysis is presented in Table 1.

Table 1. Kind of Audio-Visual Training Offered in Colleges Under Different Sponsorships

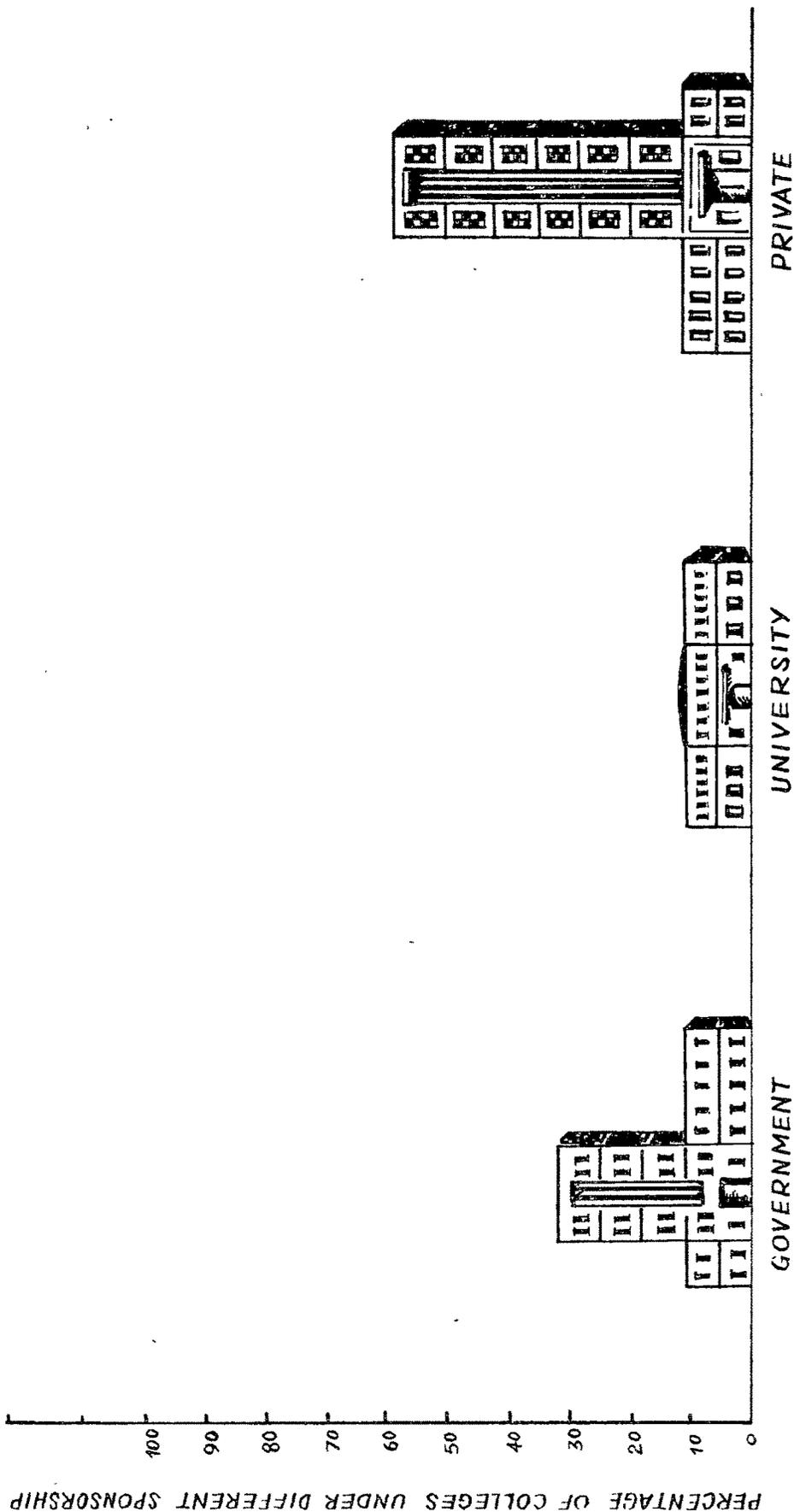
Sr. No.:	Kind of audio-visual education training programme:	:Government		:University		:Private		: Total	
		: Num-ber	: Per cent	: Num-ber	: Per cent	: Num-ber	: Per cent	: Num-ber	: Per cent
I	Offering audio-visual education as a special field only.	3	9.7	0	0	4	9.52	7	8.86
II	Offering audio-visual education as a general training only	24	77.3	3	50.0	31	73.82	58	73.42
III	Offering audio-visual education as a special field as well as general training both	4	13.0	3	50.0	7	16.66	14	17.72
Total		31	100.00	6	100.0	42	100.0	79	100.0

The list of the teachers colleges in the country upto the year 1965 given in Appendix A, presents the entire position of the sponsorship of the colleges in the country and the following figures in Table 2 give an overall picture of the same. It is also illustrated in Figure 4.

Table 2. Teachers Colleges in India under Different Sponsorship (1965)

Sponsor	Total No. of colleges	Per cent
Government	81	32.74
University	25	10.18
Private	141	57.08
Total	247	100.00

This clearly indicates that the highest number (141) of colleges (57.08%) are sponsored by the private agencies. It suggests that the teacher education movement is well recognised at the private level. The Government contribution in this movement is also encouraging as eightyone colleges (32.74%) are under its sponsorship. But it seems from the data in Table 2 that no appreciable consideration is given to this programme by the Indian Universities as only twenty five colleges (10.18%) are sponsored by them.



SPONSORS

FIGURE - 4

TEACHERS COLLEGES IN INDIA UNDER DIFFERENT SPONSORSHIP

100
100
100

The data in Table 1 indicate that the general training in audio-visual education is offered by as many as fifty-eight colleges (73.42%). It seems that the operation of the programme for general training is perhaps within the reach of the available resources or the basic requirements for conducting such a kind of training are not very demanding. Audio-Visual education training programme in India is in the infant stage as already reviewed in Chapter II. Therefore, the initial efforts are likely to be in the direction of providing the general training to a large number of trainees and gradually advancing towards specialization. This trend is visible in a few colleges. From the data given in Table 1 as few as seven colleges (8.86%) are at present giving only the specialized training in the field. This may be considered as an innovation for future development in the field of audio-visual education specialization. It is also found that as many as some fourteen colleges (17.72%) provide both general and special types of opportunities in the training programme. Here general training is considered essential for all the trainees and the option is given to them for specialized training. No doubt the number of such colleges is very small, but it is an encouraging feature of the training programme. Since the provision for both the types of training demands more resources, a great number of colleges may not have

taken up this kind of training programme. The data about the objectives of the training programme are presented in the pages to follow.

Objectives of Audio-Visual Education Training Programme

The data about the objectives of audio-visual education training programmes are given in Table 3.

The sum total against each objective was made of the number of colleges observing it. Such totals were further arranged in the descending rank order. This rank indicates the popularity of each objective in the colleges.

It is found from the data in Table 3 that 98.71 per cent of the colleges aim at acquainting the teachers with the various modern tools of teaching techniques, i.e. audio-visual aids. It indicates that the broad principle of introducing the teachers to various audio-visual aids is predominantly accepted by most of the teachers colleges.

Further, it is seen from the data that more than fifty per cent of the colleges implement the following objectives :

- To help the teachers in selection and use of audio-visual aids appropriate to their respective subject matter.
- To impart training in handling and operation of audio-visual equipments (Projectors, machines etc.).
- To impart the knowledge of philosophy and principles of audio-visual education.
- To impart training in the design and development of prototype classroom instructional aids from the indigenous materials readily and inexpensively available.

Table 3. Rank Order of the Objectives According to the
Number of Colleges Observing Them

Rank order of the objec- tives	Sr.No. in the quest- ionn- aire*	Responding Colleges						Total		No. of colleges giving no respon- se
		Government		University		Private		Num- ber	Per- cent	
		Num- ber	Per- cent	Num- ber	Per- cent	Num- ber	Per- cent	Num- ber	Per- cent	
1	2	30	100.0	6	100.00	42	97.61	78	98.71	1
2	5	27	90.00	5	83.33	41	95.23	73	92.30	6
3	6	25	83.33	5	83.33	38	90.47	68	87.17	11
4	1	21	70.00	5	83.33	31	71.42	57	71.76	12
5	3	19	63.33	5	83.33	27	64.28	51	63.38	12
6	17	16	53.33	5	83.33	18	42.85	39	50.00	40
7	18	9	30.00	3	50.00	17	40.47	29	37.17	50
8	9	11	36.66	3	50.00	15	35.71	29	35.89	50
9	12	12	40.00	2	33.33	12	28.57	26	33.33	53
10	13	6	20.00	1	16.66	15	35.71	22	26.92	57
11	10	7	23.33	2	33.33	7	16.66	16	20.51	63
12	16	7	23.33	1	16.66	8	19.04	16	20.51	63
13	4	7	23.33	2	33.33	6	11.90	15	17.94	64
14	8	4	13.03	1	16.66	9	21.42	14	17.94	65
15	15	1	3.33	1	16.66	10	23.80	12	15.38	67
16	11	1	3.33	2	33.33	6	14.28	9	11.53	70
17	7	2	6.66	0	0	6	14.28	8	10.25	71
18	14	2	6.66	0	0	6	14.28	8	10.25	71

* See the full statements of objectives according to the serial numbers of the Table in the Appendix C.

It suggests that the major number of colleges aim at imparting general and elementary training in audio-visual education. This type of training in the prevailing conditions of India helps in meeting the increasing demand for the trained teachers in audio-visual education.

Below fifty per cent of the colleges keep the following objectives for their audio-visual education programmes.

- To help the extension wing/department of the college in the field of audio-visual education.
- To help in procuring the audio-visual aids and equipments to the other departments of the faculty/college.
- To develop the skill of maintenance and minor repairs of audio-visual equipments.
- To promote and organise seminars on audio-visual education among teachers and principals.
- To work as a clearing house of information about Audio-Visual Education.

These objectives largely pertain to the extension work in audio-visual education.

Less than 25 per cent of the colleges keep the following objectives in view. Perhaps they are difficult for them to implement for lack of resources.

- To impart training in preparing school broadcasting programme.
- To follow-up the teachers trained in the field of audio-visual education at the college.
- To train the teachers in preparing basic texts and manuals on the subject of audio-visual education methods and media.
- To distribute audio-visual aids and equipments to the neighbouring schools for use.
- To issue at regular intervals a catalogue of materials showing where they are available on sale, loan or gratis.
- To conduct research in the field of audio-visual education.
- To produce audio-visual aids for neighbouring schools.
- To publish bulletins and news letters of audio-visual education.

Some of the observations for the above objectives which find less acceptance with the colleges are discussed briefly.

About the school broadcasting programme only sixteen colleges (20.51%) accept this as an objective. It is obvious that this type of training requires special staff and facilities which most of the colleges lack. Hence, it is one of the difficult objectives to implement. As few as sixteen colleges (20.51%) attempt to follow-up the teachers trained in

the field in the colleges. It means most of the colleges ignore such an important goal of reaching their clientele after their initial pre-service training. So far as the objective of training the teachers in preparing basic texts and manuals on the subject of audio-visual education methods and media is concerned, only fifteen colleges (17.94%) view it as a part of their training programme. It needs sufficient resources to fulfil this objective. However, a beginning has been made by such colleges in the right direction as their efforts will help in over-coming the shortage of published literature in the field.

Only nine colleges (11.53%) out of 79 are found aiming at doing research in the field. As it requires a special staff and funds, it is an untenable objective for the most of colleges. This is an advanced area of activity in which not many colleges can engage their attention and resources. Consequently, a very few colleges publish any bulletins or news-letters or even prepare aids for audio-visual education. It indicates lack of awareness of the modern concept of audio-visual education amongst the organisers of the programme. It may also be argued that the audio-visual education programme in the country has not yet reached the stage of research, so it is ambitious to expect publication and production of audio-visual materials from the colleges in India.

Organisation of Audio-Visual Education Training
Programme

Achievement of the objectives mainly depends upon the adequate organisation of the entire training programme. The organisation of audio-visual education training programmes in the teachers colleges included the following items for inquiry.

- Curriculum construction.
- Planning the course outline.
- Course revision.
- Staff pattern (qualifications, experience, staff availability, pay scales, selection of staff for audio-visual education department).
- Work-load of the staff of audio-visual education department/section.
- Training programme(Theory, Practicals, Off-campus training, Film show etc.).
- Selection of candidates for audio-visual education as a special field (criteria, methods etc.).
- Examination of teacher trainees.
- Audio-Visual aids and equipment availability.
- Research and publication in audio-visual education.
- General publication.
- Budget.
- Over and above all these items, the opinions and suggestions were invited from the respondents about the organisation of audio-visual education training programme to make it more effective.

Curriculum Construction

The data of curriculum construction are given in Table 4. Out of 79 colleges 70 colleges replied to the item on curriculum construction. Further, out of these 70 colleges 21 colleges (30.00%) replied that the Principal and the Head of the department of the college construct the curriculum but it is not possible to believe how they could devise curriculum independent of the University Syllabus Committee or Board of Studies in Education. It appears that these colleges refer to internal instructional arrangements which are in the hands of the college principal and head of department. Amongst these twenty one colleges fifteen are private (42.86%) and six are the Government colleges (21.43%).

As many as nineteen colleges (27.54%) report that the curriculum is constructed through the committee appointed by the university authorities. Out of these nineteen colleges eight colleges (22.86%) are private, four colleges (out of six) are university sponsored and seven (25.00%) are the Government colleges.

As far as fourteen colleges (20.29%) report that their curriculum is made by the Head of the Department. It appears here again that they refer not to syllabus but to the internal instructional programme within the powers of the heads of the department. These fourteen colleges include six private

Table 4. The Practice of Curriculum Construction Followed by the Colleges

Item	Responding Colleges				Total (N=69)
	Government Number: (N=28)	University Number: (N=6)	Private Number: (N=35)	Percent Percent (N=69)	
By the head of the department	8	0	6	17.14	14
By the Principal of the College.	3	2	3	8.57	8
By college Principal and department head.	6	0	15	42.86	21
By committee of the heads of different departments and Principals.	2	0	3	8.57	5
By committee of all the teaching staff of Audio-Visual Department.	2	0	0	0	2
By the committee appointed by the university authorities.	7	4	8	22.86	19
By the committee representing schools, commercial firms dealing in A.V. Aids and equipment, State Education Department, College and University authorities.	0	0	0	0	0
Total Replies	28	6	35	100.00	69
No. of colleges not replied	3	0	7		10
Total	31	6	42		79

colleges (17.14%) and eight Government colleges (28.58%). Similarly, eight colleges (11.59%) do the curriculum construction only through the Principal. Here also the same interpretation can be applied as above.

In the same way there are five colleges which report that they frame curriculum by involving the heads of the different departments and the principal of the college. Out of these five colleges three (8.57%) are the private and two are the Government colleges (7.14%). Finally, from the data it can be generalised that the concept of modern curriculum construction is not clear with several colleges. It is understood in two different senses: (i) Syllabus and (ii) instructional programme arrangements. The data reveal that syllabus is taken for granted and considered as a matter of university administration but the institutional programme arrangements are done by different methods in various colleges. It appears that colleges have a long way to go in modern process of curriculum development in which audio-visual educators, administrators, commercial producers of audio-visual materials, specialized educational technologists and schools are involved.

Planning the Course Outline. Data on planning the course out-line are given in Table 5.

Table 5. Sponsorwise Number of Colleges Planning the Course Out-line

Item	No. of Responding Colleges Sponsored by			Total (N=78)
	Government (N=31)	University (N = 5)	Private (N=42)	
Planning the course out-line in Audio-Visual Education	16 (51.61)	3 (60.00)	17 (40.47)	36 (46.15)
Not planning the course out-line in Audio-Visual Education	15 (48.39)	2 (40.00)	25 (59.53)	42 (53.85)
No. of Colleges not replied	0	1	0	1
Total	31 (100.00)	6 (100.00)	42 (100.00)	79 (100.00)

(Figures in the parenthesis indicate percentage)

By planning the course out-line the teaching programme is well-balanced and made uniform throughout the training programme. The organisation of the training programme, therefore, can be made more adequate and thus effective through this activity by planning and arranging the timely requirements during the training programme. This activity, as seen from the data in Table 5, is performed by 36 colleges (46.15%) and 42 colleges (53.85%) ignore planning the course out-line. It is quite inexplicable why majority of the colleges are not planning their course out-line in details as it may not demand any additional cost but only effort and time on the part of the

staff members concerned. Perhaps there may be lack of leadership or encouragement from the heads of the college to do this. However, it is desirable that colleges should plan the course work beyond syllabus outline to make the training programme more meaningful and purposeful.

Out of 36 colleges which plan their course-outlines, seventeen colleges (40.47%) are under the private sponsorship and three are university colleges and sixteen colleges are government sponsored.

The general picture of this activity shows that the university colleges are at the top followed by the government-sponsored colleges. The private colleges seem to be lagging behind in the planning of the course out-line.

Factors considered in Planning the Course Out-line. The data about the factors considered in planning the course outline are given in Table 6.

The data indicate that as many as 28 colleges (41.79%) plan their course out-line on the probable availability of the materials and the other required facilities at the time of teaching the respective unit in audio-visual education during the training schedule in the college.

This is the practical way of planning the course out-line as the resourcefulness of the required facilities play an

Table 6. Factors considered by the Colleges in Planning the Course Out-line

Factors considered for planning the course out-line	Number of Responding Colleges			
	Government (N=22)	University (N=4)	Private (N=41)	Total (N=67)
- Proper availability of the required facilities at the time of teaching the respective unit to the trainees.	8 (36.36)	4 (100.0)	16 (39.02)	28 (41.79)
- Synchronise their audio-visual education training programmes with that of the All India State Board of Education, Extension Department of the colleges and such other agencies.	5 (22.73)	0 (0)	9 (21.96)	14 (20.90)
- Yearly assignments under the supervision and guidance of the head of the audio-visual education department of the college.	4 (18.18)	0 (0)	8 (19.51)	12 (17.91)
- Course out-line prepared by the university.	5 (22.73)	0 (0)	8 (19.51)	13 (19.40)
Total	22 (100)	4 (100)	41 (100)	67 (100)
No. of colleges not Replied.	9	2	1	12
<u>Grand Total</u>	<u>31</u>	<u>6</u>	<u>42</u>	<u>79</u>

(Figures in the parenthesis indicate percentage)

important role. Out of these 28 colleges sixteen colleges (39.02%) are private and eight colleges (36.36%) are the Government sponsored. Four university colleges also consider this factor for planning their course out-line.

Only 14 colleges (20.90%) plan their course out-line in consultation with the All India State Board of Education, Extension Department of the college and the other such agencies working in the field. Here the programmes of the colleges are synchronised with those of the extension agencies.

(e.g. T.V. Programme, Air Lessons, Educational Film shows, Fairs and Exhibitions etc.). This is one of the inexpensive ways to utilise the services of the other agencies working in the field, but the planning becomes dependent upon these sources and have to make changes in their routine schedule according to the programmes of these agencies. However, such available inexpensive resources should as far as possible be utilised for operating better training programmes.

Out of these fourteen colleges nine are private colleges (21.95%) and five are the Government sponsored. No university college plan the course out-line on this base. Probably the university colleges may have sufficient funds and facilities to plan on their own. It is found from the data that the private colleges take the maximum advantage of such extension services from these agencies.

As few as twelve colleges (17.91%) plan the course out-line on a very flexible base of yearly assignments under the supervision and guidance of the head of the audio-visual education department of the college. This clearly indicates the insecurity of the availability of the required facilities and the lack of planned working of the programme. This type of flexibility may some times cause deterioration in the quality of training also. Out of these twelve colleges, eight are private and four colleges are Government sponsored.

Thirteen colleges (19.32%) depend upon the university for the planning of course out-line. The university plans the course out-line or syllabus and provides it to the affiliated colleges. It is likely that the head of the department of audio-visual education or the Principal of the colleges is the member of the curriculum planning committee or Board of Studies in the university.

Revision of the Course

It is quite essential that the courses should be revised timely. The data of the colleges revising the course out-lines are given in Table 7.

It is found from the data that only fifteen colleges (21.42%) revise the course out-lines. It appears clearly that most of the colleges have not yet considered this aspect as so essential for their programmes. This was not the main aspect of the inquiry but just a supplementary item for the

detailed information. However, it is desirable that the courses should be revised to make them dynamic and useful.

Table 7. Number of Colleges Revising the Course Out-line

Item	: Number of Responding Colleges :			Total (N=70)
	: Government (N=27)	: University (N=6)	: Private (N=37)	
Revising the course out-line.	7 (25.92)	3 (50.00)	5 (13.41)	15 (21.42)
Not revising the course out-line.	20 (74.08)	3 (50.00)	32 (86.49)	55 (78.58)
Total	27 (100.00)	6 (100.00)	37 (100.00)	70 (100.00)
Not Responded	4	0	5	9
Grand Total	31	6	42	79

(Figures in the parenthesis indicate percentage)

Period of Revising the Course. The data about the revision period are given in Table 8.

It reveals from the data in Table 8 that a very few colleges make the revision of the course at a regular interval. As few as seven colleges revise the course, but no regular interval of the time-period is observed. Any way it is a desirable initiative in this direction.

Table 8. The Period of Revising the Syllabus
Shown by the Colleges

Period of Revision	Number of Responding Colleges			Total (N=13)
	Government (N=7)	University (N=3)	Private (N=3)	
Yearly	1 (14.29)	0 (0)	1 (33.33½)	2 (15.38)
After three years	1 (14.29)	1 (33.33½)	1 (33.33½)	3 (23.07)
After five years	0 (0)	1 (33.33½)	0 (0)	1 (7.69)
No regular period	5 (71.42)	1 (33.33½)	1 (33.33½)	7 (53.86)
Total	7 (100.00)	3 (100.00)	3 (100.00)	13 (100.00)
Not Responded	24	3	39	66
Grand Total	31	6	42	79

(The figures in the parenthesis indicate percentage)

The courses should be revised atleast after the period of three to five years considering the developments in the field of audio-visual education. It appears in India that the development in this field is not so fast that it may encourage the colleges to revise the courses annually. The researches in the field are also not so frequent. Hence, the course revision may be adequate if done even after three to five

years' regular interval in the present available conditions of audio-visual education in the country. Looking to the present rate of development in audio-visual education, yearly revision may not find any more new addenda in the syllabus, but there may be some changes on the basis of the last years' experiences in the audio-visual education training programme.

Grounds (Factors) for Revising the Syllabus. The data about the grounds of revising the syllabus are given in Table 9.

Table 9. The Factors considered by the Colleges for Revising the Syllabus

Factors considered for course Revision	Number of Responding Colleges			
	Government (N=7)	University (N=4)	Private (N=2)	Total (N=13)
Latest developments in the field of audio-visual education	2 (28.57)	1 (25.00)	1 (50.00)	4 (30.77)
Changing needs of schools and community	2 (28.57)	2 (50.00)	1 (50.00)	5 (38.46)
Change in curriculum	3 (42.86)	1 (25.00)	0 (0)	4 (30.77)
Total	7 (100.00)	4 (100.00)	2 (100.00)	13 (100.00)
Not Responded	24	2	39	66
Grand Total	31	6	42	79

(Figures in the parenthesis indicate percentage)

Only five colleges (38.46%) are revising the syllabus on the considerations of the changing needs of the schools and the community. Though the number of such colleges is very small, the basis they have preferred is quite appreciable in view of making the programme dynamic. There are four colleges (30.77%) which revise the syllabus on the basis of the latest developments in the field. It may, therefore, keep the content of the programme ever fresh and may equip the teachers with the modern audio-visual teaching techniques. Similarly other four colleges (30.77%) report that they revise the syllabus just on the basis of the periodical review by the curriculum committee or the Board of Studies of the affiliating university.

Staff for Audio-Visual Education

Staff is the executive machinery of the entire training programme. However, this is not the major consideration of the investigation as it is on the border line of the study undertaken. Some relevant facts collected are given here.

(A) Availability. From the data it is found that the availability of the specialised staff for audio-visual education in the teachers colleges in the country is very poor. Out of 79 colleges very few colleges have the professor or the reader for audio-visual education. It is quite possible that there may be an acute shortage of such qualified persons

in the field as the audio-visual education is still in the initial stages in the country.

But eighteen colleges out of 79 colleges are having a lecturer in audio-visual education. It clearly signifies that the persons suitable for the lecturer's post in audio-visual education are to some extent available. Out of 31 Government sponsored colleges only two colleges have full-time lecturers and four colleges have part-time lecturers in audio-visual education. Out of 6 university departments of education, two departments have full-time lecturers in audio-visual education. Out of 42 private colleges fourteen colleges have part-time lecturers in audio-visual education. Looking to the percentage of the availability of the lecturers in audio-visual education, the private colleges are found to rank the first and the departments of the university rank second and the Government colleges rank third. The data indicate on the whole that there is an acute shortage of the qualified teaching staff in the audio-visual education.

So far as the operational staff is concerned, only eleven colleges out of 79 are having the projectionist in the department. Out of these eleven, seven are the Government, one is university and three are the private colleges. It seems that the percentage of Government colleges having projectionists

is higher than that of the university and private colleges. Very negligible number of colleges out of 79 colleges are having the other operational staff such as electrician/technician, artist/photographer, audio-visual laboratory attendant, driver, etc. The shortage of such staff may be due to the non-availability of such personnel since there is no special provision for preparing such persons. Also there is no encouragement or patronage of society for such careers.

There is no college having audio-visual librarian and the clerk for this programme. If a systematic audio-visual library or museum is to be organised and maintained, librarian is the inevitable need in the department. The available data lead to the clear understanding that the teaching, operational, and ministerial staff is in short supply or the colleges cannot afford to fill up the posts or no such data about the staff in the departments are available with them to furnish the requirements of the inquiry. But even in such a situation eighteen colleges out of 79 have sought the practical way of meeting with this shortage by appointing the graduates in physical science preferably with degree in education as lecturers in-charge of audio-visual education. No doubt such a substitute may

not fully satisfy the requirements of the department, but it may be considered as one of the practical ways to manage the programme as effectively as possible. Such staff members would do well if they are given a short practical training in audio-visual techniques for their efficient performance.

(B) Experience of the Staff. In the prevailing staff position in audio-visual education the professional experience of the staff is beyond consideration. Since the qualified persons are not available in the field, emphasis on experience is not placed by the institutions while making appointments for the audio-visual education programme.

(C) Pay Scales of the Staff. The data show various scales of pay depending upon the sponsorships. The university colleges generally offer the U.G.C. scales of pay. From the available data it is found that the lowest scales are offered by the private colleges. Hence, there is no uniformity in scales of pay.

(D) Qualifications of the Staff. It is quite obvious that in such a situation of the dearth of the qualified staff in audio-visual education, higher qualifications and experience may not be expected. When there is no availability of the staff, quality becomes a secondary question or a matter of chance.

Now, out of the eighteen lecturers in audio-visual education mentioned above eleven are science graduates with post-graduate training in education; seven with post-graduate degree both in science and education; but there is no lecturer with any special degree, diploma or certificate in audio-visual education.

Within the available operational staff very few are technically qualified. Perhaps they might have acquired sufficient work experience for the purpose.

(E) Selection of Staff for Audio-Visual Education. The data indicate no remarkable difference of opinion amongst the sponsors about the desirable standards of qualifications and experience of the staff for audio-visual education. Out of 79 colleges twenty eight colleges responded to this item. Amongst these twenty eight colleges, two colleges opined that the professor should possess post-graduate degree in Arts or Science and Doctorate in education and should have minimum three years of field experience. Six colleges expected post-graduate degree in science and education and diploma in audio-visual education with one to three years of experience. Nine colleges desired post-graduate degree either in Arts or Science and education with five years of field experience. Eleven colleges found graduate degree in Arts and Science and

post-graduate degree in education with diploma in audio-visual education and more than five years of experience in the field essential for this post. For the Readers post almost all the thirty five colleges opined the same standards as those of the professors with no more remarkable differences.

So far as the lecturers' posts are concerned, forty colleges found graduate degree in Arts or Science and post-graduate in education, minimum three years experience in the field and certificate or short training in audio-visual education as desirable for the post.

For the tutors' posts twenty six colleges desired a graduate degree in Arts or Science and education with a certificate of short-course training in audio-visual education. They also valued three years of experience in the field as essential requirement for the post.

For the operational staff also the desirable qualifications and experience in the field are stated by a few colleges as follows : Nine colleges expressed their views that the projectionist should be holder of Secondary School Certificate along with a licence in projection. The mechanic's certificate and one to three years of experience in the field were also considered necessary.

For the post of an artist eleven colleges desired degree, diploma or certificate in Fine Arts or Drawing Teachers' Certificate with about five years of experience in the field. The hobby of photography was also considered as a desirable qualification by a few colleges with a view to appoint an artist-cum-photographer. But for the separate post of photographer fifteen colleges expected diploma in photography and a long experience in the field as essential qualifications.

Fourteen colleges opined that the audio-visual librarian should have degree in Arts or Science and Diploma in Library Science or Museology and three years of working experience.

The data show that the expectations for the selection of staff both teaching and operational are very high or ideal. But from the data a great gap is visible between the qualifications of the existing staff in the colleges and the qualifications expected. It can be ascertained that there is a strong desire of having the qualified and experienced staff for audio-visual education in the teachers colleges. But these desires are not satisfied in the existing staff conditions in the colleges due to several limitations previously discussed. Therefore, it can very safely be concluded that the prevailing staff is under-qualified for the jobs. In the other words,

there is severe scarcity of the qualified and experienced staff for audio-visual education programmes.

Work-load of the Staff of Audio-Visual Education Department/Section. The data of the average work load of the staff in different activities of audio-visual education department, section of the colleges of teachers are presented in Table 13.

From the data it is found that the average work load of the professor per week is 15 hours and 30 minutes. In the Government colleges it is 13 hours while in the private colleges, it is 18 hours per week. University Departments of Education have not responded to this item as most of them do not have the post of the Professor of Audio-Visual Education. It is seen from the data that work-load of the professor in the private colleges is more. Out of these 18 hours work load of the professor, five hours are spent in the work other than that of audio-visual education (Table 12). It gives a clear understanding that the professor of audio-visual education may be engaged in teaching other subjects also. It is good that he becomes acquainted with the other areas in education but the audio-visual education programme perhaps may suffer due to his diversified attention and work.

The work-load of the assistant professor or reader is sixteen hours per week. Looking to the Table 10, 11 and 12,

it is found that the assistant professors or readers are considerably engaged in research work.

The average work-load of the lecturers in audio-visual education is 18 hours 40 minutes per week. But the work-load of the lecturers in the private colleges is 24 hours per week, it is 15 hours per week in the university colleges and it is 17 hours per week in the Government colleges. From the Table 10, 11 and 12 it is found that they are much engaged in the practical aspect of the training programme. The average work-load of the tutors is 19 hours per week. It is found from the Tables 10, 11 and 12 that they are more engaged in practicals and the other activities in the colleges.

About the operational staff the data indicate that the work-load of the projectionists is 26 hours per week. They are mainly engaged in the practical aspect of the training programme and in the other aspects of the colleges. It may be assumed that they may be engaged in the extension work, off-campus, film-shows and such other activities.

It is found from the data in Table 13 that the average work-load of an artist is 17 hours and 20 minutes per week which is less as compared to the other operational staff. Similarly, the photographer is also engaged for only 11 hours and 20 minutes per week which is also very less as compared to

TABLE 10. Average Work-load of the Staff of Audio-Visual Education/Department/
Section Per Week of Government Colleges

Staff	Number of Work-hours per week in							Total			
	Theory		Practical		Research		Administra- tion		Others	Total	
	H.M.	H.M.	H.M.	H.M.	H.M.	H.M.	H.M.				H.M.
Professor of Audio-Visual Education.	1-30	1-30	3-00	6-00	1-00	13-00					
Asst. Professor/Reader in Audio- Visual Education.	3-30	2-30	5-00	3-00	3-00	17-00					
Lecturer in Audio-Visual Education.	4-00	6-00	3-00	-	4-00	17-00					
Instructor/Tutor in Audio-Visual Education.	1-30	8-30	-	-	6-00	16-00					
Projectionist.	-	13-00	-	-	12-00	25-00					
Electrician/Technician.	-	13-00	1-00	-	8-00	22-00					
Artist.	-	7-00	2-00	-	6-00	15-00					
Photographer.	-	8-00	1-00	-	2-00	11-00					
Audio-Visual Laboratory Attendant.	-	25-00	-	-	10-00	35-00					
Clerk.	-	-	-	-	30-00	30-00					

Table 11. Average Work-load of the Staff of Audio-Visual Education Department/Section
Per Week of Universities

Staff	Number of work-hours per week in										Total	
	Theory		Practical		Research		Administ-ration		Others			
	H.M.	H.M.	H.M.	H.M.	H.M.	H.M.	H.M.	H.M.	H.M.	H.M.		
Professor of Audio-Visual Education.	-	-	-	-	-	-	-	-	-	-	-	-
Asst. Professor/Reader in Audio-Visual Education.	3-00	2-00	6-00	2-00	2-00	1-00	1-00	14-00				
Lecturer in Audio-Visual Education.	4-00	8-00	2-00	-	-	1-00	1-00	15-00				
Instructor/Tutor in Audio-Visual Education.	6-00	12-00	-	-	-	3-00	3-00	21-00				
Projectionist.	-	18-00	1-00	-	-	8-00	8-00	27-00				
Electrician/Technician.	-	12-00	2-00	-	-	8-00	8-00	22-00				
Artist.	-	12-00	2-00	-	-	3-00	3-00	17-00				
Photographer.	-	6-00	2-00	-	-	3-00	3-00	11-00				
Audio-Visual Laboratory Attendant.	-	18-00	-	-	-	2-00	2-00	20-00				
Clerk.	-	-	-	-	-	-	-	-				
Audio-Visual Librarian.	-	-	-	-	-	-	-	-				

Table 12. Average Work-load of the Staff of Audio-Visual Education Department/Section
Per Week of Private Colleges

Staff	Number of Work-Hours per Week in							Total			
	Theory		Practical		Research		Administra- tion		Others		
	H.M.	H.M.	H.M.	H.M.	H.M.	H.M.	H.M.		H.M.	H.M.	H.M.
Professor of Audio-Visual Education.	3-30	1-30	4-00	4-00	4-00	4-00	5-00	18-00			
Asst. Professor/Reader in Audio-Visual Education.	6-00	3-00	3-00	3-00	3-00	3-00	2-00	17-00			
Lecturer in Audio-Visual Education.	8-00	10-00	1-30	1-30	-	-	4-30	24-00			
Instructor/Tutor in Audio-Visual Education.	6-00	12-00	-	-	-	-	2-00	20-00			
Projectionist.	-	-	-	-	-	-	-	-			
Electrician/Technician.	-	-	-	-	-	-	-	-			
Artist.	-	12-00	-	-	-	-	8-00	20-00			
Photographer	-	9-00	-	-	-	-	3-00	12-00			
Audio-Visual Laboratory Attendant.	-	20-00	-	-	-	-	10-00	30-00			
Clerk.	-	-	-	-	-	-	-	-			
Audio-Visual Librarian.	-	-	-	-	-	-	-	-			

Table 13. Average Work-Load of the Staff of Audio-Visual Education Department/Section
Per Week in the Colleges under Different Sponsorships

Staff	Number of Work-Hours per week in					Average H.M.
	Government		Private		Total	
	H.M.	H.M.	H.M.	H.M.		
Professor of Audio-Visual Education.	13-00	-	18-00		31-00	15-30
Asst. Professor/Reader in Audio-Visual Education.	17-00	14-00	17-00		48-00	16-00
Lecturer in Audio-Visual Education.	17-00	15-00	24-00		56-00	18-40
Instructor/Tutor in Audio-Visual Education.	16-00	21-00	20-00		57-00	19-00
Projectionist.	25-00	27-00	-		52-00	26-00
Electrician/Technician.	22-00	22-00	-		44-00	22-00
Artist.	15-00	17-00	20-00		52-00	17-20
Photographer.	11-00	11-00	12-00		34-00	11-20
Audio-Visual Laboratory Attendant.	35-00	20-00	30-00		85-00	28-20
Clerk.	30-00	-	-		30-00	30-00
Audio-Visual Librarian.	-	-	-		-	-

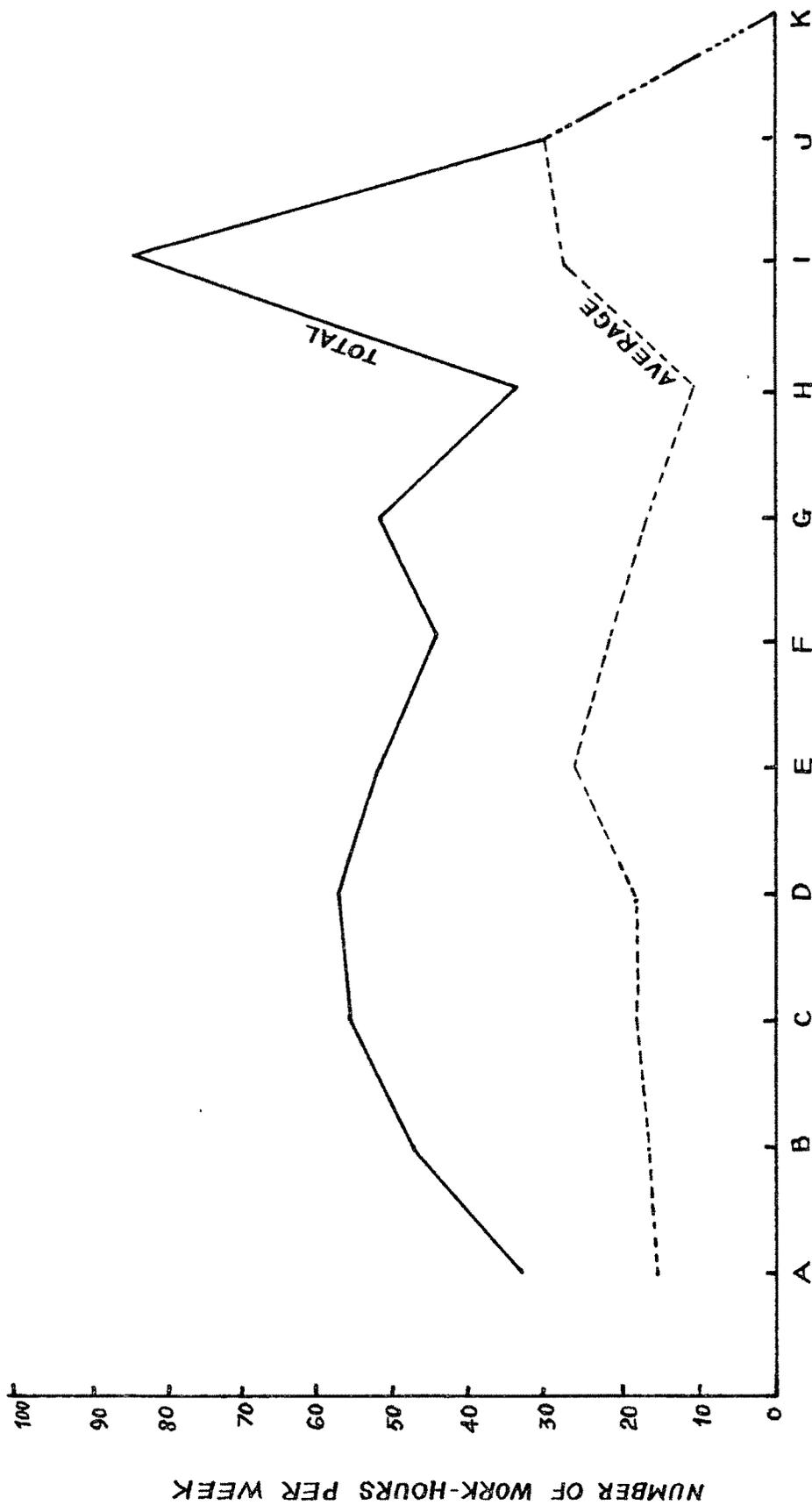
the other operational staff. Probably, there are no sufficient assignments for the artist and photographer in the colleges yet. The spare services of these persons can wisely be utilised in the production of instructional materials and ultimately developing a good museum of audio-visual aids. Further, they can be spared for the extension work in the field also. The data in Table 13 are illustrated in Figure 5. The staff is indicated by letters A to K in order given in the Questionnaire Part II Page 6 in Item F.

Data in the Tables 10,11 and 12 develop a clear picture that the staff of the private colleges have more work load than that of the Government. University colleges have a very flexible programme for the assignment of work to the staff.

The other important finding from the data is that almost all the staff members are considerably engaged in the other activities of the college. It may be possible that the staff may not be specially employed for audio-visual education department/section in the colleges.

Nature of Training Programme

The teachers colleges operating audio-visual education training programme offer different kinds of training in audio-visual education such as general training, special training and both the types of training in the subject. The graphical representation showing the nature of training programmes offered



STAFF

FIGURE - 5

AVERAGE WORK-LOAD OF THE STAFF OF AUDIO-VISUAL-EDUCATION

DEPARTMENT / SECTION PER WEEK

(TABLE VIII)

105

by the colleges is given in Figure 6.

Capacity of the Colleges to Admit the Candidates for Special Training. The capacity of the colleges for admitting the candidates for the special training in audio-visual education is shown in Table 14.

From the data in Table 14, it is clearly seen that most of the colleges (61 out of 79) did not give their capacity for admission. It indicates that there is a great uncertainty in admitting the candidates for training. May be that the number of candidates to be admitted depends upon the yearly available budget resources or the professional scope available to the trainees in the audio-visual education.

However, only eighteen colleges have definitely stated the capacity of admission. Out of 31 Government colleges only three colleges have the capacity to admit more than 25 candidates per year, and four colleges admit below 25 candidates. Out of six university colleges two have the capacity to admit more than 25 candidates and one college less than 25 candidates per year. It indicates clearly that the university colleges also have limitations about intake capacity. Universities are expected to produce more candidates and prepare leaders in the field. Hence, they should extend the facilities for admitting more candidates by diverting more resources towards this branch of education. Out of 42 private colleges only two colleges

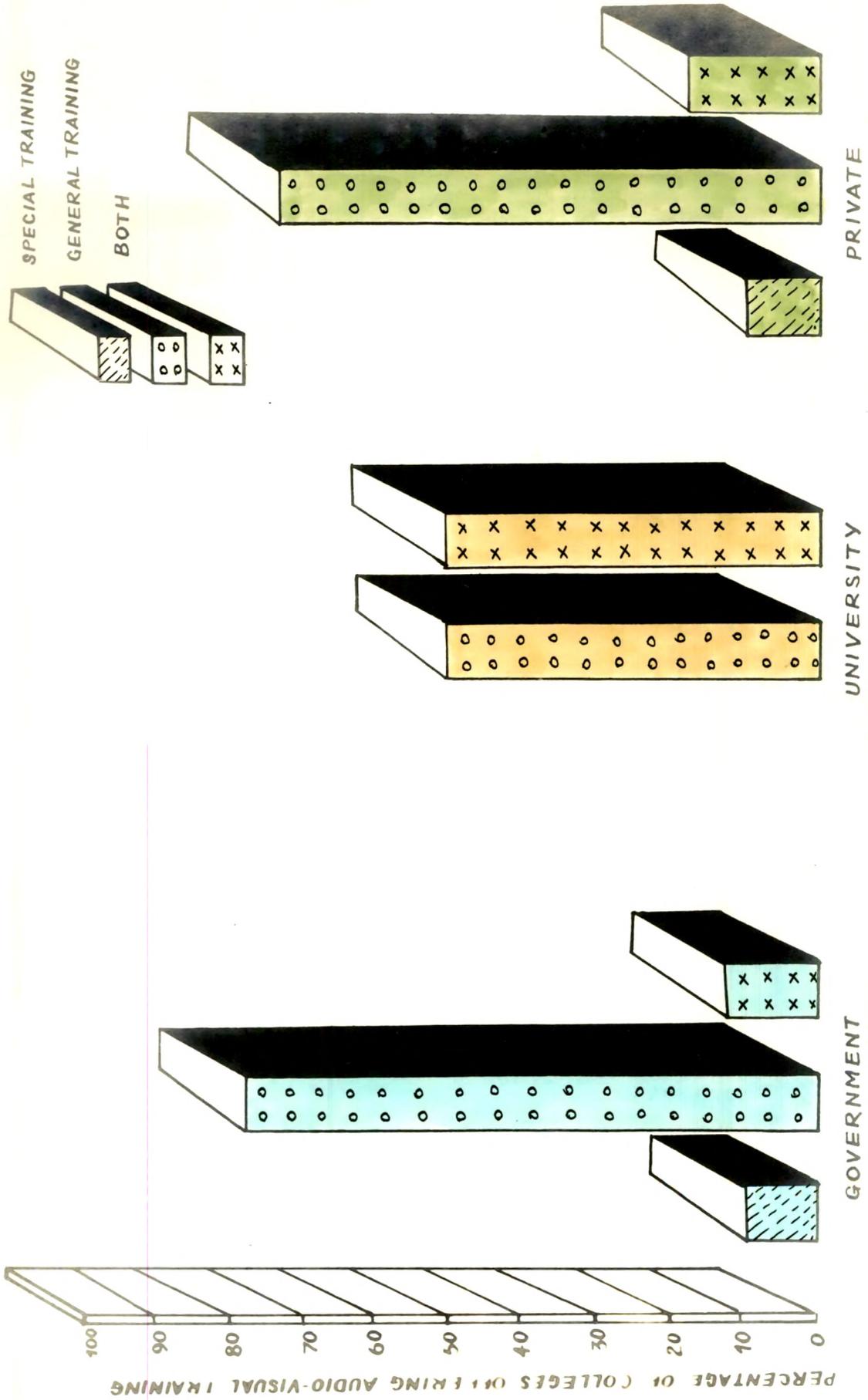


FIGURE - 6
TYPES OF AUDIO-VISUAL-EDUCATION TRAINING OFFERED BY TEACHERS
TRAINING COLLEGES UNDER DIFFERENT SPONSORSHIP

Table 14. Sponsorwise Number of Colleges Stating the Capacity of Admission for

Audio-Visual Education as a Special Field

Sponsors of the Teachers Colleges	Number of Colleges showing the							:No.of :colleges:colleges: :giving :giving : :Response: Response: :above :	: Total : No.of : Colleges			
	Intake capacity by Range of Admission											
	1-10	11-15	16-20	21-25	26-30	31-35	36-40	41-45	46 and above			
Government	2	-	1	1	-	-	1	1	1	7	24	31
University	-	-	1	-	-	1	1	-	-	3	3	6
Private	3	1	-	2	1	1	-	-	-	8	34	42
Total	5	1	2	3	1	2	2	1	1	18	61	79



can admit more than 25 candidates while six colleges admit less than 25 candidates.

Table 15. Sponsorwise Mean Numbers of the Capacity Range For Admitting the Candidates in Audio-Visual Education as Special Field

Sponsors of the Teachers Colleges	* Mean Numbers of Intake Capacity										Sponsor -wise total intake capacity
	5	13	18	25	28	33	38	43	48		
Government	2 (10)	0	1 (18)	1 (23)	0	0	1 (38)	1 (43)	1 (48)		180†
University	0	0	1 (18)	0	0	1 (33)	1 (38)	0	0		89
Private	3 (15)	1 (13)	0	2 (46)	1 (28)	1 (33)	0	0	0		135
Total	5	1	2	3	1	2	2	1	1		404

* Mean numbers of the ranges of intake capacity shown in Table 14

† The figures in the bracket is the sum total of the Figures of the mean intake capacity.

If the mean number of the candidates in all the ranges of admission capacity (Table 15) are admitted by the seven Government colleges, 180 candidates can be trained per year. Similarly three university colleges within their mean capacity can train 89 candidates per year and eight private colleges can train 135 candidates in a year. Thus, all these eighteen

colleges together within their mean capacity can prepare 404 candidates totally per year (Table 15). Therefore, on average one college can train 22 candidates per year within the capacity stated by them.

The sum of the minimum and maximum numbers of each range (Table 14) of the capacity was divided by two and the division of each range was taken as mean for the respective range of intake capacity.

Eighteen colleges within their mean capacities can train 404 candidates per year, assuming full utilisation of their mean capacity.

Each college therefore, can train approximately 22 candidates per year (N=18).

Eighteen colleges trained 190 candidates on average per year. Therefore, each college trained approximately 11 candidates per year. The average capacity per college per year is to train 22 candidates (Table 15). Therefore, it is calculated that 50 per cent of the capacity is utilized. In other words, there is some wastage caused by non-utilization of available resources.

Training Performance during the Last Five Years (1959-64).

The data of the number of candidates trained in the special field during the last five years i.e. from 1959 to 1964 are

given in Table 16.

Table 16. Sponsorwise Number of Candidates admitted
in Audio-Visual Education as Special Field
during 1959-1964

Sponsors of the Teachers Colleges	Years					Total of 5 years	Average per year
	1959-60	1960-61	1961-62	1962-63	1963-64		
Government	15	55	61	82	130	343	69
University	44	48	52	66	75	285	57
Private	27	21	70	97	107	322	64
Total	86	124	183	245	312	950	190

The average number of candidates trained by the Government colleges is 69 per year during the last five years. Similarly the average number of the candidates trained per year by the university and the private colleges are 57 and 64 respectively. It is seen from the data that the average number of the candidates trained by the university colleges is the lowest, and that of the Government is the highest. The year-wise total number of the candidates trained since 1959 to 1964 shows the gradual increase in the number. It increases at an average rate of 38.24 per cent per year. The data show that 950 candidates are totally trained by all the 18 colleges during the last five years. Therefore, it is approximately found that 11 candidates

are trained per year per college. But it is found from the Table 15 that an average capacity of one college is to train 22 candidates per year. Hence, it can clearly be concluded that about 50 per cent of the capacity is utilised, and the rest remains idle. There may be several reasons for such a gap. Further inquiry in this matter is beyond the scope of this research. However, efforts should be made to have full utilization of the available resources. This needs an urgent investigation to find out the barriers in the full utilization of the resources and thus to prevent the waste of national wealth.

The content of the syllabus of audio-visual education training programme is also the important factor. The data on the topics taught in the theory of audio-visual education are also collected and are presented in the pages ahead.

Theory Teaching

The topics included in the theory teaching in different kinds of training programmes are shown in Table 17.

Special Training. Almost all the seven colleges (100%) included the following topics in theory teaching.

- Psychological basis of audio-visual aids.
- General principles of preparation and use of simple, flat Display Materials (e.g. Flannel Graphs, charts, posters, photographs, diagrams, flash cards, flip-books, sketches, cartoons, B.B. writing, maps, graphs etc.).

- 3-Dimensional materials (e.g. models, puppets, objects, specimen, diorama, etc.).
- Projectable materials (e.g. filmstrips, 16 m.m. films, slides, etc.).
- Working principles and operational mechanical knowledge of tape-recorder, epidiascope, filmstrip projector, 16 m.m. film projector.
- Principles of utilizing the method of recorded tapes.

It is seen that through these topics, the theory of audio-visual education and the general principles of preparation and use of various audio-visual aids are introduced to the trainees.

The items in theory teaching included by more than 50 per cent of the colleges are as follows :

- The role of audio-visual instruction in modern education.
- Communication, its role in present day education.
- The relation of audio-visual aids to methods of teaching¹/₂.
- Classification and selection of audio-visual aids.
- Working principles and operational mechanical knowledge of radio, recording and playback equipment, overhead projector.
- The administration of audio-visual instruction programme.
- Maintenance of audio-visual library.
- Sources of information regarding materials, equipment and supplies.
- Testing the results of audio-visual instruction in the class-room.

Table 17. The Topics including in Theory Teaching
in the Different Kinds of Training Programmes

Serial order of theory topics in the questionnaire	Colleges offering		
	Special Field (N=7)	General Training: (N=58)	Both Types (N=14)
	Number	Number	Number
1	6 (85.71)	55 (94.82)	12 (85.71)
2	6 (85.71)	32 (55.71)	5 (35.71)
3	7 (100.00)	43 (74.13)	10 (71.42)
4	6 (85.71)	56 (96.55)	14 (100.00)
5	5 (71.42)	50 (86.2)	12 (85.71)
6	7 (100.00)	45 (77.58)	9 (64.28)
7	7 (100.00)	53 (91.37)	10 (71.42)
8	7 (100.00)	38 (65.51)	7 (50.00)
9	7 (100.00)	41 (70.68)	10 (71.42)
10	2 (28.57)	20 (36.36)	1 (7.14)
11	1 (14.28)	1 (1.72)	2 (14.28)
12 (i)	5 (71.42)	35 (60.34)	6 (42.85)
(ii)	7 (100.00)	30 (51.72)	6 (42.85)
(iii)	2 (28.57)	12 (20.68)	3 (21.43)
(iv)	4 (57.14)	16 (27.58)	3 (21.43)

contd.

Table 17 (contd.)

Serial order of theory topics in the questionnaire	Number of Colleges offering		
	Special Field (N=7)	General Training (N=58)	Both Types (N=14)
(v)	7 (100.00)	43 (74.13)	8 (57.14)
(vi)	7 (100.00)	45 (77.58)	8 (57.14)
(vii)	7 (100.00)	30 (51.72)	7 (50.00)
(viii)	4 (57.14)	10 (17.24)	0 (0)
(ix)	2 (28.57)	18 (27.58)	3 (21.43)
(x)	2 (28.57)	7 (12.00)	2 (14.28)
(xi)	3 (42.85)	13 (22.41)	1 (7.14)
13	4 (57.14)	9 (15.51)	1 (7.14)
14	4 (57.14)	6 (10.34)	1 (7.14)
15	6 (85.71)	24 (41.36)	6 (42.86)
16	4 (57.14)	12 (20.68)	1 (7.14)
17	2 (28.57)	0 (0)	0 (0)
18	0 (0)	21 (36.2)	3 (21.43)
19 (i)	6 (85.71)	16 (27.58)	3 (21.43)
(ii)	6 (85.71)	17 (28.95)	5 (35.71)
(iii)	6 (85.71)	14 (24.13)	4 (28.71)

contd.

Table 17 (contd.)

Serial order of theory topics in the questionnaire :	Number of colleges offering		
	Special Field (N=7)	General Training (N=58)	Both Types (N=14)
(iv)	5 (71.42)	33 (56.89)	7 (50.00)
(v)	6 (85.71)	35 (60.34)	8 (57.14)
(vi)	6 (85.71)	41 (70.68)	8 (57.14)
(vii)	5 (71.42)	15 (25.96)	1 (7.14)
(viii)	7 (100.00)	28 (48.27)	7 (50.00)

(Figures in the parenthesis indicate percentage)

(The detailed statements of the topics are given in the Appendix C.)

This includes some specific and special areas in audio-visual education which may produce the specialist in the field.

The topics included by less than fifty per cent of colleges are as follows :

- General principles of preparation and use of press materials (e.g. circular letters, news paper, pamphlet, folders etc.).
- How to write the script for school broadcast, tape, P.A. equipment programme and phonograph.

- Working principles and operational mechanical knowledge of P.A. equipment, camera, silk screen equipment, microscope.
- = Research methodology in audio-visual education.

No college includes the topics of the organisation of audio-visual programme in the school.

General Training. The topics included by more than 70 per cent of the colleges operating general training in the field are as follows :

- The role of audio-visual instruction in modern education.
- The relation of audio-visual aids to methods of teaching.
- Classification and selection of audio-visual aids.
- General principles of preparation and use of the simple flat display materials (e.g. flannel graph; charts, posters, photographs, diagrams, flash cards, flip-books, sketches, cartoons, B.B. Writing, maps, graphs, etc.
- Working principles and operational mechanical knowledge of film strip projector.

The topics included here are of introductory or general nature between 50 to 75 per cent colleges included the following topics in theory teaching.

- Communication, its role in present day education.
- Psychological basis of audio-visual aids to methods of teaching.
- General principles of preparation and use of projectable materials (e.g. filmstrips, 16 m.m. films, slides etc.).

- Working principles and operational mechanical knowledge of radio, tape-recorder, epidiascope, 16 m.m. film projector.
- Principles of utilizing the demonstration, field trip and mock-up methods in teaching.

These are the topics related to the general practices of teaching through audio-visual aids.

The following topics are included by the colleges between 25 to 50 per cent.

- Working principles and operational mechanical knowledge of recording and play-back, and camera.
- Sources of information regarding materials, equipment and supplies.
- Organisation of audio-visual programme in the schools.
- Principles of utilizing plays, sociodrama, role-playing, mock-ups and recorded tapes methods in teaching.

These topics develop the trend that the number of colleges decrease from general topics to the specific or special topics.

There are some colleges below 25 per cent including the following topics.

- General principles of preparation and use of press materials (e.g. circular letters, news papers, pamphlet etc.).
- How to write the script for school broadcast tape, P.A. equipment programme, and phonograph.

- Working principles and operational mechanical knowledge of P.A. equipment, overhead projector, silk-screen equipment.
- The administration of audio-visual instruction programme.
- Maintenance of audio-visual library.
- Testing the results of audio-visual instruction in the classroom.
- Principles, of utilising role-playing method in teaching.

Both Types of Training. These colleges impart both special and general training in the field. Hence, they may have the theory topics of similar nature to those of the special and general programmes. It is also evident from the data that there is no remarkable difference traced out in the topics for theory teaching in these colleges.

The data, further analysed according to the sponsorship are given in Table 18.

From the data it is clearly evident that so far as the topics in theory teaching are concerned no remarkable difference is found in the colleges with different sponsorships. Perhaps, the reason is that the colleges either Government or Private are affiliated with the examining universities and hence they have usually similar syllabi. A little difference may be possible due to some differences in the syllabi prescribed by the different universities in the country.

Table 18. The Items of Theory Teaching in Various Types of Audio-Visual Training Programme

Serial order of theory topics in the questionnaire	Number of Colleges Offering								
	Special Field	General Training		Both Types					
	Government	University	Private	Government	University	Private	Govt.	Univ.	Private
1	3	-	3	20	3	32	3	2	7
2	3	-	3	13	1	18	3	1	1
3	4	-	3	14	3	26	2	2	6
4	3	-	3	21	4	31	4	3	7
5	4	-	1	20	3	27	3	2	7
6	4	-	3	19	-	26	2	3	4
7	4	-	3	21	3	29	2	2	6
8	5	-	2	15	-	23	2	1	4
9	4	-	3	15	4	22	3	2	5
10	1	-	1	6	1	13	1	0	0
11	0	-	1	3	-	4	0	1	1
12	3	-	2	13	3	19	2	1	2
(i)	2	-	5	12	1	17	4	3	0
(ii)	1	-	1	6	2	4	1	0	1
(iii)	4	-	0	6	2	8	2	2	0
(iv)	3	-	4	17	1	25	3	3	1
(v)	4	-	3	16	2	27	2	2	3
(vi)	4	-	3	12	2	16	3	3	1
(vii)	4	-	3	12	2	16	3	3	1

contd.

Table 18 (contd.)

Serial order of theory topics in the questionnaire	Number of colleges offering						Both Types
	Special Field	General Training	University:Private	Government:University:Private	Government:University:Private	Government:University:Private	
(viii)	1	4	3	1	5	1	2
(ix)	1	7	1	2	9	1	1
(x)	2	5	0	-	2	1	1
(xi)	2	6	1	-	7	2	1
13	3	3	1	-	6	1	2
14	2	3	2	-	3	2	1
15	4	10	2	2	12	2	4
16	0	4	4	1	7	1	3
17	1	-	1	-	-	-	-
18	-	10	-	1	10	1	2
19	3	7	3	-	9	2	1
(i)	3	7	3	-	10	3	2
(ii)	4	7	2	-	7	1	1
(iii)	3	15	2	-	18	3	2
(iv)	2	10	4	-	25	3	2
(v)	3	17	3	1	23	4	2
(vi)	3	10	2	-	5	0	1
(vii)	3	10	4	1	17	3	3
(viii)	3	10	4	1	17	3	3

(The detailed statements of the topics are given in Appendix C).

Practical Training

Practical training in audio-visual education makes the programme more meaningful and effective. It is the complementary part to the theory training in the field. Therefore, it was found essential to determine the topics included in the practical training of audio-visual education. The data of the topics for practical training in the colleges operating this programme are shown in Table 19.

1. Practicals for Special Training. More than 70 per cent of the colleges offering special training in the field of audio-visual education include the following topics in their practical part of the training programme.

- Simple flat display materials (Flannel graph, photograph, flash card, flip book, charts, posters, diagrams, sketches, cartoons, maps and graphs, pictures etc.).
- 3 dimensional materials (models, puppets, objects specimen, diorama etc.).
- Projectable materials (filmstrips, 16 m.m. films, slides etc.
- Practical training in the operation and handling of the 16 m.m. film projector, filmstrip projector, epidiascope, tape-recorder.
- Presenting lesson plans for practice teaching by demonstrating, exhibition, film, linguaphone, tape-recorder and slide methods.

These topics acquaint the trainees with the skills of using the various audio-visual aids and handling and operation

Table 19. The Items included in Practical Training in
The Different Kinds of Training Programmes

* Serial order of the Topics for Practicals in the Questi- onnaire	Number of Colleges Offering		
	Special Field only (N=7)	General Training only (N=58)	Both Types of Training (N=14)
(a)	5 (71.42)	52 (89.65)	13 (92.85)
(b)	5 (71.42)	37 (63.79)	8 (57.14)
(c)	5 (71.42)	37 (63.79)	9 (64.28)
(d)	-	14 (24.13)	4 (28.71)
(e)	1 (14.28)	10 (17.24)	2 (14.28)
(f) (i)	7 (100.00)	36 (62.00)	9 (64.28)
(ii)	7 (100.00)	48 (82.75)	10 (71.42)
(iii)	6 (85.71)	47 (81.00)	12 (85.71)
(iv)	2 (28.57)	8 (13.77)	3 (21.43)
(v)	3 (42.85)	14 (24.13)	4 (28.71)
(vi)	6 (85.71)	30 (51.72)	7 (50.00)
(vii)	1 (14.28)	24 (41.36)	5 (35.71)
(viii)	1 (14.28)	20 (34.50)	5 (35.71)
(ix)	2 (28.57)	9 (15.51)	2 (14.28)
(x)	1 (14.28)	8 (13.77)	2 (14.28)

contd.

Table 19 (contd.)

*Serial order :		Number of Colleges Offering			
of the topics :		Special	Field:	General Training:	Both Types of
for practicals:		only	only	only	Training
in the Questi-		(N=7)	(N=58)	(N=14)	
onnaire					
(g)	(i)	2 (28.57)	13 (22.41)	3 (21.43)	
	(ii)	2 (28.57)	12 (20.68)	3 (21.43)	
	(iii)	3 (42.85)	12 (20.68)	3 (21.43)	
	(iv)	7 (100.00)	36 (62.04)	9 (64.28)	
	(v)	4 (57.14)	25 (43.10)	8 (57.14)	
	(vi)	6 (85.71)	20 (34.50)	6 (42.85)	
	(vii)	3 (42.85)	15 (25.96)	5 (35.71)	
	(viii)	5 (71.42)	30 (51.72)	9 (64.28)	
	(ix)	2 (28.57)	24 (41.36)	6 (42.85)	
	(x)	5 (71.42)	15 (25.96)	4 (28.71)	
	(xi)	6 (85.71)	22 (37.92)	8 (57.14)	
	(xii)	5 (71.42)	38 (65.51)	8 (57.14)	
	(xiii)	1 (14.28)	0	0	

*The detailed statements of the topics are given in Appendix C.

of the projectors, other machines and equipments.

Some colleges between 25 to 50 per cent include the following topics for practical training.

- Practical training in the operation and handling of overhead projector, public addressing equipment, tracing table.
- Presenting lesson plans for practice teaching by play, sociodrama, role-playing, mock-up and radio.

It indicates that more complicated the equipments, lesser the number of colleges giving training in them. Secondly it seems that the simple audio-visual aids and equipments are included for training by more number of colleges. Below twenty five per cent of the colleges include the following items in the practical training.

- The script for school broadcast, tape, P.A. equipment programme and phonograph.
- Practical training in the operation and handling of the camera, recording and playback equipment and duplicating equipment (Silk screen, printing, duplicating machine etc.).
- Presenting lesson plans by films.
- Minor repairs of the equipments.

It indicates that these equipments and methods are not much utilized in practice teaching, and not much popular in day to day classroom teaching. Perhaps the present situation is not encouraging for the use of such aids and equipments in

schools.

Practicals for General Training. More than 75 per cent of the colleges include the following topics for practical training.

- Simple flat display materials (Flannel graph, photograph, flash card, flip book, charts, posters, diagrams, sketches, cartoons, maps and graphs, pictures etc.).
- Practical training in the operation and handling of filmstrip projector, and epidiascope.

These topics include mostly the simple audio-visual materials and equipments. These are most commonly used in the teaching programme in schools.

Some colleges falling between 50 to 75 per cent include the following topics for practical training of advanced nature.

- Three dimensional materials (models, puppets, objects, specimens, diorama etc.).
- Projectable materials (filmstrips, 16 m.m. films, slides etc.).
- Practical training in the operation and handling of 16 m.m. film projector and tape recorder.
- Presenting lesson plans for practice teaching by demonstration, film and slides.

These items include such audio-visual methods and materials that they may be easily available, easy to operate, handle and use in teaching. About 25 to 50 per cent of colleges still go further and include the following items for practical training.

- Practical training in the operation and handling of recording and playback equipment.
- Presenting lesson plans for practice teaching by field trip, exhibition, radio, linguaphone tape-recorder.

The highly advanced topics for practical training given below are included by less than 25 per cent of colleges.

- The script for school broadcast, tape, P.A. equipment programme and phonogram.
- Press materials (circular letters, news paper, pamphlet, folders etc.).
- Practical training in operating and handling of overhead projector, P.A. Equipment, tracing table, duplicating equipment (silk screen printing, duplicating machine etc.).
- Presenting lessons plans for practice teaching by play, socio-drama, role-playing.

The topics of mass communication nature e.g. writing radio-script, press materials, etc. are absent in the programme of majority of the colleges operating courses in audio-visual education.

Practicals for Both Kinds of Training. These colleges give both special and general training in the field. Therefore, some items of specialised and some of general nature are

included in the practical training. They include both the types of topics. This is also clearly evident from the data in Table 19 that there is no remarkable difference in the items included in the other two types of programmes and this programme.

The data were further analysed on the basis of sponsorships. It is presented in Table 20.

Off-Campus Training

Off-campus training in context of this study includes the following areas.

Arranging field-trips and study tours to provide the first-hand direct experience about the subject. For example, a field-trip visit to a dairy will develop the correct concept about the hygienic handling of milk. Similarly a farm visit to observe some agricultural operations in the real situation will give better understanding about the agricultural practices. Further it includes the visits to museums, fairs, exhibitions, the film studies, instructional material, workshops, some industries, irrigation projects etc. It also includes visits to some advanced centres in audio-visual education (National Institute of Audio-Visual Education) research stations, radio broadcasting stations, modern auditoriums and theatres, and the places of ancient monuments.

This is also an essential aspect of the ideal training programme in audio-visual education. Therefore, it was found essential to include this in the study. The responses about the off-campus training activity are shown in Table 21.

Out of 79 colleges operating audio-visual education training programme only 18 colleges (22.78%) are giving off-campus training. Out of these 18 colleges 6 colleges (33.33%) are the Government colleges, 2 colleges (11.11%) are university sponsored and ten colleges (55.55%) are the private colleges. The data indicates that out of those colleges which conduct off-campus programmes or even consider them as a desirable activity, the private colleges rank foremost followed by the government colleges and university departments respectively. But with respect to their total number according to sponsorships, university departments excel in this activity. Private colleges come next followed by the government institutions.

On the whole there is no large-scale acceptance of the off-campus activities in the programme. It may be due to several reasons such as : lack of communication facilities, non-availability of such places of visits within the reach or shortage of time and funds with the colleges. However, this assumption requires an objective and systematic study of the barriers which lie beyond the scope of this research.

Table 20. The Items of Practical Training in Various Types of Audio-Visual Training Programmes

*Serial order : of the topics : for practicals : in the quest- ionnaire :	Number of Colleges Offering											
	Special Field		General Training		Both Types		Special Field		General Training		Both Types	
	Univer- : sity	Priva- : te	Univer- : sity	Priva- : te	Univer- : sity	Priva- : te	Univer- : sity	Priva- : te	Univer- : sity	Priva- : te	Univer- : sity	Priva- : te
(a)	2	0	3	20	2	30	6	1	6	1	6	6
(b)	2	0	3	15	-	22	3	3	3	3	2	2
(c)	4	-	1	14	2	21	4	2	4	2	3	3
(d)	-	-	-	5	1	8	2	2	2	2	0	0
(e)	1	-	-	4	1	5	1	1	1	1	0	0
(f)	4	-	3	17	2	17	4	3	4	3	2	2
(i)	5	-	2	20	2	26	4	3	4	3	3	3
(ii)	4	-	2	20	2	25	4	3	4	3	5	5
(iii)	1	-	1	5	1	2	1	2	1	2	0	0
(iv)	1	-	2	10	1	3	2	2	2	2	0	0
(v)	2	-	4	13	1	16	3	1	3	1	3	3
(vi)	1	-	-	12	1	11	2	2	2	2	1	1
(vii)	1	-	-	10	2	8	1	3	1	3	2	2
(viii)	-	-	2	4	-	5	1	1	1	1	0	0
(ix)	1	0	0	4	-	4	1	1	1	1	0	0
(x)	1	0	0	4	-	4	1	1	1	1	0	0

contd.

Table 20 (Continued)

*Serial order of the topics for practicals in the questionnaire	Number of Colleges Offering									
	Special Field		General Training				Both Types			
	Government	Private	Government	Private	Government	Private	Government	Private	Government	Private
(g)	1	1	7	-	6	2	1	0	1	0
(ii)	1	1	7	-	5	1	2	0	2	0
(iii)	3	-	6	-	6	1	2	0	2	0
(iv)	3	4	17	1	18	3	4	2	4	2
(v)	2	2	11	1	13	3	3	2	3	2
(vi)	4	2	10	-	10	2	3	1	3	1
(vii)	2	1	9	1	5	3	1	1	1	1
(viii)	4	1	13	2	15	4	3	2	3	2
(ix)	1	1	10	1	13	2	1	3	1	3
(x)	3	2	8	-	7	1	2	1	2	1
(xi)	3	3	10	2	10	3	4	1	4	1
(xii)	3	2	16	2	20	3	3	2	3	2
(xiii)	1	0	-	-	-	-	-	-	-	-

* The detailed statements of the topics are given in Appendix C.

Table 21. Duration of the Off-Campus Activity in the Audio-Visual Training Programme *

Sponsors	Number of Colleges stating the duration of visits (day)					Total No. of Colleges doing it (N=18)	Percent: No. : Percent:	No. of colleges found it		Percent: No. : Percent:		
	One	2-3	4-5	6-7	15 and above			useful (N=18)	desirable (N = 30)			
Government (Out of 31)	1	1	0	2	2	0	6	33.33	6	33.33	11	36.67
University (Out of 6)	1	1	0	0	0	0	2	11.11	2	11.11	3	10.00
Private (Out of 42)	3	3	1	1	1	1	10	55.56	10	55.56	16	53.33
Total (Out of 79)	5	5	1	3	3	1	18	100.00	18	100.00	30	100.00

*Places of visits are not specified by the respondents.

Film-Shows

Similarly, an equally important aspect of this training programme is the film-shows in the colleges. It is found from the previous data that good number of colleges teach in theory and practicals about the 16 m.m. motion picture and operation and handling of the 16 m.m. film projector. Therefore, it is assumed that the colleges arrange some film-shows. A list of the pertinent films (Appendix C) was supplied to the respondents to ascertain the film-shows arranged in the colleges. Data about the film-shows are given in Table 22.

Table 22. Sponsorwise Number of Colleges arranging and Stating the Duration of Film-Show

Sponsors	Number of Colleges stating the interval of Filmshow				No. of Colleges keeping the Film-show
	Weekly	Fort-nightly	Monthly	More than month or no specific period mentioned	
Government (Out of 31)	3 (66.67)	4 (33.33)	9 (33.33)	5 (38.46)	26 (40.63)
University (Out of 6)	1 (8.33)	2 (16.67)	2 (7.42)	0 (0)	5 (7.81)
Private (Out of 42)	3 (25.00)	6 (50.00)	16 (59.25)	8 (61.54)	33 (51.56)
Total (Out of 79)	12 (100)	12 (100)	27 (100)	13 (100)	64 (100)

(Figures in the parenthesis indicate percentage)

Out of 79 colleges operating audio-visual education training programme 64 colleges (81.00%) are arranging the film-shows. This is quite a satisfactory number of colleges doing this activity. Out of these 64 colleges 26 colleges (40.63%) are the Government, 5 colleges (7.81%) are the university and 33 are the private colleges (51.56%). Looking to the total number of colleges under respective sponsorships, universities rank first followed by the government colleges and private colleges in order.

Frequency of Film-Shows. Further, it was thought essential to know the interval period of the film-shows. The data about the interval period of the film-shows are given in Table 22. Most of the colleges (27) report the frequency of filmshows as one in a month, while some colleges (13) mention no specific period for film-shows. A few colleges (12) arrange two or more film-shows a month. On the whole the frequency of film-shows per month arranged in the training programme of audio-visual education is not very satisfactory.

Further, an inquiry was also made about the types of films screened by them.

Exhibition of Films. Further, a list of the pertinent films in the field was provided to the respondents to ascertain the types of films shown by them. The data about the films shown are given in Table 23.

Table 23. Films Shown by the Colleges in Different
Kinds of Training Programmes

* Sr.No. of the Films	Number of Colleges showing the Films to the Trainees of			: Total
	Special (N=7)	Field:General (N=58)	Training:Both the Types : of Training (N=141)	
1	4	6	3	13
2	0	2	0	2
3	3	5	2	10
4	1	1	1	3
5	0	3	0	3
6	4	10	3	17
7	3	10	3	16
8	5	11	3	19
9	3	25	9	37
10	3	11	2	16
11	6	18	7	31
12	1	4	1	6
13	3	5	2	10
14	2	14	8	24
15	6	10	4	20
16	2	5	1	8
17	2	3	1	6
18	4	7	3	14
19	2	5	1	8
20	5	7	3	15
21	6	11	6	23
22	2	3	1	6
23	1	2	1	4
24	2	7	2	11
25	3	4	1	8
26	5	14	5	24
27	1	1	1	3

*The detailed statement of the serial numbers may be seen in Appendix C.

(1) Films shown in Special Field. Out of seven colleges between 50 to 75 offering special field more than four colleges exhibit the following films :

1. Brush techniques - The language of water colours.
2. Busy hands.
3. Library on wheels.
4. Using the class-room film.
5. On the air.
6. Voice of India.
7. Development of Communication.
8. Men with wings.

It indicates clearly from the above films that the trainees are introduced to the elementary training in drawing and other such techniques, preparing air lessons, history of the communication development, and the use of motion picture in teaching.

The film viz. Brush techniques The language of water colour may give the understanding about the elementary art of drawing and painting techniques. This is quite essential for the preparation of audio-visual aids for the class-room teaching. In case of the absence of artist atleast some simple visual materials can be prepared by the teacher if introduced to some elementary arts through films. The film viz. Using the class-room films may give good guidance for the

effective use of modern picture in the class-room teaching. The film viz. On the air may also help in developing the better understanding about the radio lessons. Development of communication film may give the brief idea about the history of the communication development and the factors contributing the in the development of the same.

Less than four colleges exhibit the following films which means they are not so frequent in use for even the specialized training programme.

1. Drawing with a pencil.
2. News-paper story.
3. Bring the world to the class-room.
4. New way to greater education.
5. Facts about films.
6. Defence against invasion.
7. Receiving radio messages.
8. Sending radio messages.
9. Lessons from the air.
10. Message in a moment.
11. How to make hand-made lantern slides.
12. Plastic art sculpture.
13. Spotnews.
14. Magic in the air.
15. History of writing.
16. Plastic Arts Sculpture.
17. Sight-seeing at Home.

The data reveals that no college shows the following films even in the specialized training programme.

1. Shadow Land
2. Puppetry String Marionetter.

Films for General Training. Out of 58 colleges offering the general training in audio-visual education, the following films are most popular.

1. Bring the World to the Class-room.
2. Using the Class-Room Film.

This indicates that by showing the above films the colleges wish to emphasize more on the importance of motion picture in general training. It may also help the trainees in preparing and giving the film-lessons in teaching. These films are useful for the large group and hence they may be found more popular in the colleges imparting general training in the field.

These are some films which are not frequently used by most of the colleges offering general training. These films are as follows :

1. Busy hands.
2. News-paper story.
3. Library on wheels.
4. New way to greater education.
5. Defence against invasion.
6. On the air.
7. Voice of India.
8. Development of communication.
9. Men with wings.
10. Sight seeing at home.
11. Using the class-room films.

Some theoretical films like development of communication, News-paper story, New way to greater education are generally exhibited by less number of colleges as they have no immediate impact on the general training programme. But these are the important films for educating the trainees about the theories and principles of audio-visual education.

The following films are found to be least used by such colleges.

1. Shadow land.
2. Drawing with a pencil.
3. Plastic art sculpture.
4. Puppetry string marionetter.
5. Spotnews.
6. Facts about films.
7. Sending radio messages.
8. Lessons from the air.
9. Message in a moment.
10. Magic in the air.
11. How to make handmade lantern slide.
12. History of writing.

Some of the above films like Spotnews, Sending radio message, Lessons from the air, Message in a moment, Magic in air etc. are mass communication in nature. They may be suitable for Air lessons. But in India such a stage is not yet fully developed. Hence, they may be of too advanced types for the present position.

Films for Both Kinds of Training. Out of fourteen colleges offering both the types of training, seven or more colleges prefer to show the following films :

- Bring the world to the class-room.
- Using the class-room film.
- Defence against invasion.

Less than seven colleges use the following films.

- On the air.
- Man with wings.
- Using the class-room films.
- Brush techniques - The language of water colour.
- Shadow land.
- Drawing with a pencil.
- Plastic art sculpture.
- Puppetry string marionetter.
- Busy hands.
- News-paper story.
- Library on wheels.
- New way to greater education.
- Spotnews.
- Facts about films.
- Receiving radio messages.
- Sending radio messages.
- Voice of India.
- Lesson from the air.
- Development of communication.
- Message in a moment.
- Magic in the air.
- Sight seeing at home.
- How to make handmade lantern slide.
- History of writing.

These films, as found from the data, are exhibited by very few colleges even in the general and both kinds of training programmes. These films as already stated are of more theoretical nature and may not be available so frequently.

Finally, the exhibition of films mainly depends upon their availability also. For arranging the programmes of film-shows, it is inevitable to be aware of the informations about the sources to obtain the films on loans, sale or at gratis. With this view in mind further inquiry about such sources is also made.

The data about the sources for obtaining the films on loan are given in Table 24.

Sources for Obtaining the Films on Loan. From the data it is found that the maximum number of colleges (36) obtain the films from U.S.I.S. (United States Information Services) on loans. Similarly the State Departments also extend considerable services in this direction to the colleges. British Information Services are also actively contributing in extending their services to the colleges by lending films on loan. The number of colleges (11) obtaining films from the Central Film Library is less than the above stated agencies. It is clearly seen from the data that the foreign agencies are popular in imparting the extension services. Similarly, the Central and the State Governments are also giving good services

Table 24. Sources of Film Procurement on Loan

Rank : order : Sources of Obtaining the of the: Films on Loan Source:	Number of Colleges			
	Gover- nment	Univ- ersity	Priv- ate	Total
1. United States Information Services (U.S.I.S.).	3	4	29	36
2. State Department of Audio-Visual Education, Publicity Department.	13	5	11	29
3. British Information Service (B.I.S.).	10	2	12	24
4. Central Film Library.	4	2	5	11
5. Extension Department of the Colleges of Education.	3	-	4	7
6. National Institute of Audio-Visual Education (N.I.A.V.E.)	3	-	2	5
7. Canarian Film Society.	2	1	-	3
8. Ministry of Information and Broadcasting, Government of India.	-	1	1	2
9. United States Aid for International Development. (U.S.A.I.D.).	-	-	1	1
10. United Soviet Socialist Republic (U.S.S.R.).	-	-	1	1
11. United Nations Educational Scientific and Cultural Organisation (UNESCO).	-	-	1	1
12. Plan Publicity Office.	-	-	1	1
13. Commercial Firms.	-	-	1	1
14. Ministry of Education, Government of India, New Delhi.	1	-	-	1

to the colleges in procuring the films on loan.

Only five colleges obtain films from the National Institute of Audio-Visual Education now known as the Department of Visual Education which is the leading institution of the National Council of Educational Research and Training (NCERT). Further, the data indicate that the commercial firms do not extend such services to any significant measure. Hence, it can be generalised from the data that the foreign and Government agencies together extend their services in this field.

The foreign agencies have also established several rich libraries in the country. Even beyond the scope of this inquiry, some colleges stated that they obtain good library services in audio-visual education from these foreign agencies.

Criteria for the Selection of Candidates for Special Field

Having ascertained the required administrative aspects, the suitability of the candidates for the field should also be studied. It was intended to know the ground on which the candidates for special training are selected. The criteria for the selection of candidates for special field in audio-visual education considered by the colleges are given in Table 25. It may be noted that there is no special selection procedure for the general training as it is compulsory for all the trainees alike.

Adding the number of colleges offering only special training to the number of colleges offering both special and general training in audio-visual education, the total number amounts to twenty-one (21).

Out of 21 colleges operating the special training in audio-visual education 20 colleges (95.23%) considered the degree in science an essential criterion for the admission in the special field. These 20 colleges included 7 Government, 3 University and 10 Private colleges. It is seen from the data that private colleges give less emphasis on this point than the other counterparts. Perhaps, it seems to be the understanding of these colleges that the science graduates have the necessary scientific aptitude and mechanical skills which may help them in quicker adoption of the skills of the operation and handling of audio-visual aids and equipments. It is logical that the science graduates are aware of the general principles of physical science on which the audio-visual aids and equipments are prepared and operated.

Besides the basic qualification of degree in Science, the other requirements most preferred by more than 75% colleges are as follows :

Table 25. Selection Criteria for the Candidates in Special Field in Colleges

Rank Order : of the Criteria	Criteria for the Selection	Number of Responding Colleges			Total (N=21)
		Government (N=7)	University (N=3)	Private (N=11)	
1.	Science graduates	7 (100.00)	3 (100.00)	10 (90.90)	20 (95.23)
2.	Hobby of Photography, Painting, Decorative Arts, Music, Picture Collection, Films Viewing, Drama etc.	5 (71.42)	3 (100.00)	11 (100.00)	19 (90.47)
3.	Professional experience allied to the field of Audio-Visual Education.	6 (85.71)	1 (33.33)	10 (90.90)	17 (80.95)
4.	Worked as in-charge of Audio- Visual programme in the school.	5 (71.42)	1 (33.33)	10 (90.90)	16 (76.19)
5.	Experience of arranging field- trips, study tours and active participant in the school, taluka or district level exhibition.	6 (85.71)	2 (66.66)	8 (72.72)	16 (76.19)
6.	Attended any special work-shop or seminar on Audio-Visual Education.	6 (85.71)	2 (66.66)	8 (72.72)	16 (76.19)
7.	Passed drawing and/or music test.	2 (28.57)	2 (66.66)	8 (72.72)	12 (57.14)

continued

Table 25 (contd.)

Rank Order of the Criteria	Criteria for the Selection of Candidates	Number of Responding Colleges				Total (N=21)
		Government (N=7)	University (N=3)	Private (N=11)		
8.	Possessing Diploma or certificate in Audio-Visual Education.	4 (57.14)	0 (0)	8 (72.72)	12 (57.14)	
9.	Attended national and district level fairs and exhibitions.	4 (57.14)	1 (33.33)	5 (45.45)	10 (47.61)	
10.	Good performance in the Selection test and interview for the field.	2 (28.57)	0 (0)	7 (63.63)	9 (42.85)	
11.	Radio artist.	1 (14.28)	0 (0)	4 (36.36)	5 (23.80)	

1. Hobby of photography, painting decorative art, music, picture collection, film viewing, drama etc.
2. Professional experience allied to the field of Audio-Visual Education.
3. Worked as in-charge of Audio-Visual Programme in the school.
5. Experience of arranging field-trips, study tours and active participant in the school, taluka or district level exhibitions.
6. Attended any special work-shop or seminar on Audio-Visual Education.

The above criteria appears most acceptable as it is rather practicable for colleges to use while selecting the trainees for the programme. Comparatively, the following requirements are least preferred as they seem to be impracticable for colleges.

1. Passing drawing and/or music test.
2. Possessing diploma or Certificate in A.V. Education.
3. Attending national and/or district level fairs and exhibitions.
4. Good performance in the selection test and interview for admission.
5. Competence as a Radio Artist.

It is logical that very few colleges (23.8%) desired the candidates to be a radio-artist because this characteristic

may not make a noticeable difference in the performance of the training during the training programme. No doubt, he may be able to write good scripts for air lessons, tapes, etc. which do not form a part of special training at present.

Method of Selection of the Candidates for Special Field.

It was further decided to know the methods of selecting the candidates for admission in the special field. The responses about the methods of selection are presented in Table 26.

Table 26. Methods of Selecting the Candidates for Special Field

Sr. No.:	Methods	Number of Responding Colleges			Total (Percentage)
		Govern-ment	Univer-sity	Priva-te	
1.	Interview	-	2	1	3 (30.00)
2.	Test	2	-	1	3 (30.00)
3.	Free choice no specific method	1	-	3	4 (40.00)
Total		3	2	5	10 (100.00)

Out of 21 colleges offering special field in audio-visual education 10 colleges (47.61%) reported the methods of selecting the candidates for the special field in audio-visual education.

Out of these 10 colleges 3 colleges (30%) arrange an interview for the selection of the candidates. Three colleges(30%)

arrange the test for the selection of the candidates. Only four colleges (40%) do not follow any specific method for the selection of the candidate and offer free choice to the candidates. It indicates that there may be less number of candidates asking for this field and hence, the question of selection may not arise with them.

Majority of the colleges have not furnished with the data for this. So, it may be concluded that there may not be more applicants coming for this field. However, some method is desirable to screen the candidates' merits for this field so that the time, money and energy spent for them are rewarded in terms of better teaching-learning process.

Examination and Evaluation Procedure

To know the proportion of the weightage given to the audio-visual education in the annual examination, it was found desirable to include this item in the study. The data of theory examination of audio-visual education are given in Table 27.

Examination in the Theory of Audio-Visual Education. The items for theory examination in audio-visual education included the theory paper and the term paper in it.

Marks for Special Field. It is found from the data that all the 21 colleges imparting special training responded to the

item. Out of these 21 colleges no college keeps less than 10 marks in the theory paper. Only 2 colleges keep 11-20 marks and 10 colleges keep 31 to 40 marks for the same.

Table 27. Distribution of Marks under various Theory Heads in the Different Types of Audio-Visual Programme

Item	: Number of colleges stating the marks for : Audio-Visual Education			
	: For Special Field: : Training		: General Training	
	: Maximum : marks : Range	: Number of : colleges : (N=21)	: Maximum : marks : Range	: Number of : Colleges : (N=12)
Theory Paper	1-10	0 (0)	0 (0)	8 (66.67)
	11-20	2 (9.53)	11-20	2 (16.67)
	21-30	10 (47.61)	21-30	1 (8.33)
	31-40	9 (42.86)	31-40	1 (8.33)
	41-50	0	0	0
		21 (100.00)		12 (100.00)
Term Paper	1-10	10 (47.61)	1-10	6 (50.00)
	11-20	8 (38.09)	11-20	4 (33.33)
	21-30	3 (14.30)	21-30	2 (16.67)
	31-40	0	31-40	0
		21 (100.00)		22 (100.00)
Colleges giving No Response		0		46
Grand Total		21		58 = 79

It is reported that most of the colleges do not draw the special separate paper of audio-visual education but the questions carrying a definite number of marks are included in the paper on Current Problems in Education.

Term Paper. Out of twenty-one colleges, ten colleges spare 1 to 10 marks for this assignment, and 8 colleges spare 11 to 20 marks and three colleges keep 21 to 30 marks for this assignment. The current topics in the field are generally selected for this work. The trainees under the guidance of the respective consultants prepare the paper on the topics and submit for assessment to be included in the final examination.

Marks for the General Training. From the data it is found that out of 58 colleges 8 colleges keep 1 to 10 marks in theory paper and 20 colleges keep 11 to 20 marks in the same. Only one college keeps 21 to 30 and one 31 to 40 marks for this item. It is also found from the remarks given by the respondents that only one or two questions are included in the Paper on Current Problems in Education or in the Methods of Teaching.

As the responses are analysed, it is evident that most of the colleges giving general training have not responded to this item. It can be concluded from this that no due weightage is given to this field in the annual examination. A few colleges

stated in the open choice item that shortnotes are asked in the Paper on Special Methods. The training programme in audio-visual education cannot be more effective unless due credit is given to this branch of education in the annual assessment of the trainees' performance.

Term Paper. Out of 58 colleges/keep 1 to 10 marks for the assessment of the term paper. Only 4 colleges keep 11 to 20 marks and two colleges keep 21 to 30 marks for this item. It indicates clearly that this very important feature of training programme is over-looked so far as the assessment is concerned in general programmes.

It seems from the data that the colleges offering special training in the field keep more marks for these items than those offering general training and it is logical too.

Examination in the Practicals of Audio-Visual Education. It was further, desired to ascertain the importance of practical training in the examination. The data of the practical examination in audio-visual education are given in Table 28.

Practical Examination in Special Field. Practical examination in the field includes the items such as :

- (a) Handling, operation and minor repairs of projectors and other equipments.
- (b) Projects prepared (Audio-Visual aids).

Table 28. Distribution of Marks under Various Practical Heads in the Different Types of Audio-Visual Training Programmes

Items	: Number of Colleges stating the Marks : for Audio-Visual Practicals			
	: Special Field :		: General Training	
	: Maximum:No. of :	: Maximum Marks: No. of	: Range	: Colleges
	: Marks :Colleges :	: Range	: (N=21)	: (N=12)
	: Range :			
(a) Handling and operation of projectors and minor repairs.	1-10	6 (28.57)	1-10	8 (66.67)
	11-20	12 (57.14)	11-20	3 (25.00)
	21-30	3 (14.29)	21-30	1 (8.33)
	31-40	0	31-40	0
		<u>21</u> (100.00)		<u>12</u> (100.00)
(b) Projects prepared (Audio-Visual Aids).	1-10	9 (42.85)	1-10	11 (91.67)
	11-20	12 (57.15)	11-20	1 (8.33)
	21-30	0	21-30	0
		<u>21</u> (100.00)		<u>12</u> (100.00)
(c) Proper use of Audio-Visual Aids in practice teaching.	1-10	18 (85.71)	1-10	10 (83.33)
	11-20	3 (14.29)	11-20	2 (16.67)
	21-30	0	21-30	0
		<u>21</u> (100.00)		<u>12</u> (100.00)
(d) Participation in general activities of audio-visual education.	1-10	20 (95.24)	1-10	10 (83.33)
	11-20	1 (4.76)	11-20	2 (16.67)
	21-30	0	21-30	0
		<u>21</u> (100.00)		<u>12</u> (100.00)
No Response		0		46
Grand Total		21		58 = 79

- (c) Proper use of audio-visual aids in practice teaching.
- (d) Participation in general activities of audio-visual education in the colleges.

It appears from the data that most of the colleges give weightage to items (c) and (d) upto 10 marks. More than 50% colleges report higher weightage for items (a) and (b) upto 20 marks while less than 50% colleges give weightage to them upto 10 marks.

However, it is desirable that more weightage to practical training in the examination should be given. Within such a short range of marks a wider scope for practical training cannot be possible.

Practical Examination in General Training. It is found from the data that there is hardly much significance attached to the practical items of training listed in (a), (b), (c) and (d). As few as 8 to 11 colleges out of 58 colleges report that they give weightage upto 10 marks in case of each item.

So, it is evident that there is only elementary theory teaching in audio-visual education done by the colleges offering general course.

Audio-Visual Aids and Equipment Availability

Equipment facilities are one of the very important items for the effective organisation of the audio-visual education training programme. The investigation of the availability of

the audio-visual aids and equipments in the colleges was, therefore, included in this study. The data about this item are given in Table 29.

Availability of Audio-Visual Aids. From the data it is found that more than fifty per cent of the colleges are having simple audio-visual aids such as : Charts, Maps and Graphs, Models, Pictures, Diagrams, Filmstrips, Slides, Posters, Specimens, Photographs, Objects, Flash cards, 16mm motion pictures (Films), Bulletin boards with materials, Sketches, and flannel graphs. It indicates that these aids seem to be more popular in the class-room teaching. Less than fifty per cent of the colleges have the provision for the following audio-visual aids.

Pamphlets, Folders, Cartoons, Dioramas, Circular letters, Puppets, Flip books, Recorded tapes and Peg boards.

It is also found from the data that there is no remarkable difference in the availability of the above stated audio-visual aids in the colleges under different sponsorships.

Similarly, the audio-visual equipments are also important in the training programme. Only with such simple aids the purpose of audio-visual education may not be served fully as the advancement in science and technology

Table 29. Rank Order of Availability of Audio-Visual Aids
in Teachers Colleges under Different Sponsorships

Rank Order	Audio-Visual Aids	Government: (N=31)	University: (N=6)	Private: (N=42)	Total (N=79)
1.	Charts	28 (90.32)	4 (66.66)	37 (87.94)	69
2.	Maps and Graphs	27 (87.09)	3 (50.00)	37 (87.94)	67
3.	Models	27 (87.09)	3 (50.00)	36 (85.56)	66
4.	Pictures	24 (77.41)	4 (66.66)	34 (80.80)	62
5.	Diagrams	24 (77.41)	4 (66.66)	33 (78.42)	61
6.	Filmstrips	24 (77.41)	4 (66.66)	33 (78.42)	61
7.	Slides	22 (70.96)	4 (66.66)	34 (80.80)	60
8.	Posters	23 (74.14)	4 (66.66)	30 (71.28)	57
9.	Specimens	24 (77.41)	3 (50.00)	26 (61.76)	53
10.	Photographs	21 (67.74)	2 (33.33)	28 (66.52)	51
11.	Objects	21 (67.74)	3 (50.00)	27 (64.14)	51
12.	Flashcards	17 (54.83)	3 (50.00)	29 (68.90)	49
13.	16mm motion pictures (Films)	22 (70.96)	3 (50.00)	23 (54.66)	48
14.	Bulletin Board with materials	18 (58.06)	4 (66.66)	25 (54.38)	47
15.	Sketches	16 (51.61)	2 (33.33)	25 (54.38)	43
16.	Flannel Graphs	18 (58.00)	3 (50.00)	29 (68.90)	40
17.	Pamphlets	8 (25.80)	3 (50.00)	20 (47.52)	31

(Continued)

Table 29 (continued)

Rank Order	Audio-Visual Aids	Government (N=31)	University (N=6)	Private (N=42)	Total (N=79)
18.	Folders	10 (32.25)	3 (50.00)	16 (38.08)	29
19.	Cartoons	10 (32.25)	2 (33.33)	10 (23.76)	22
20.	Dioramas	6 (9.38)	3 (50.00)	8 (14.04)	17
21.	Circular letters	6 (9.38)	-	7 (16.66)	13
22.	Puppets	6 (9.38)	1 (16.66)	6 (14.28)	13
23.	Flip books	6 (9.38)	1 (16.66)	3 (7.14)	10
24.	Recorded tape	1 (3.22)	-	-	1
25.	Peg Boards	-	-	1 (2.38)	1

(Figures in the parenthesis indicate percentage)

has produced better equipments for education. Hence, to keep with the time, the modern instruments should also be introduced in the audio-visual education training programme.

Equipment Availability. The data about the equipment availability are given in Tables 30 and 31 respectively.

With a view to develop the overall availability position of different equipments and facilities the following mathematical

operations were made. The colleges under each sponsorship were categorised as: not having the respective equipment and facility, having only one and having more than one. Further, -1, +1 and +2 (Three point scale) marks were given respectively to each college under these categories. The sum total of marks for each equipment was made. These totals were finally arranged in the rank of descending order under each sponsorship. Thus the comparative position of the availability of different equipments and facilities under each sponsorship may be approximately known. Finally, the sum totals of marks for each equipment under different sponsorships were again summed-up to obtain the grand total for each equipment. The grand totals thus obtained for each equipment were arranged in the rank of descending order. The ranks under different sponsorships and the overall ranks for each equipment and facilities are shown against the serial number of the equipments and facilities in Table 31.

It is found from the data in Table 31 that most of the colleges under all the three sponsors are having the following equipments and facilities in the order given.

1. Projection Screen
2. Film-Strips and Slide Projector
3. 16 m.m. Movie Projector
4. Flannel Board.
5. Tape-Recorder
6. Epidiascope.

Table 30. The Availability of Audio-Visual Equipments and Facilities in the Audio-Visual Education Departments in the Colleges under Different Sponsorships.

Equipment Facilities	Sponsor-wise Distribution of Colleges											
	Government (N=31)	University (N=6)	Private (N = 42)	Not : Having								
	3	22	5	1	0	3	3	0	3	28	4	7
	3	16	8	4	0	2	3	1	6	24	9	3
	14	7	0	10	5	0	0	1	15	3	0	24
	3	22	4	2	0	3	2	1	5	28	1	8
	3	17	8	3	0	2	3	1	3	25	7	7
	2	20	6	3	1	3	1	1	4	27	1	10
	3	21	5	2	0	5	1	0	6	23	4	9
	7	15	3	6	1	4	0	1	9	16	1	16
	5	17	5	4	1	2	0	3	9	12	3	18
	15	9	0	7	3	1	0	2	14	7	0	21
	12	9	0	0	3	1	0	2	13	7	1	21
	6	15	7	3	1	1	2	2	7	16	7	12
	16	6	0	9	1	3	0	2	13	4	3	22
(a) 16 m.m. Movie Projector	3	22	5	1	0	3	3	0	3	28	4	7
(b) Filmstrip and Slide projector (35 m.m.)	3	16	8	4	0	2	3	1	6	24	9	3
(c) Overhead Projector	14	7	0	10	5	0	0	1	15	3	0	24
(d) Epidiascope	3	22	4	2	0	3	2	1	5	28	1	8
(e) Projection Screen	3	17	8	3	0	2	3	1	3	25	7	7
(f) Radio	2	20	6	3	1	3	1	1	4	27	1	10
(g) Tape recorder	3	21	5	2	0	5	1	0	6	23	4	9
(h) Phonograph	7	15	3	6	1	4	0	1	9	16	1	16
(i) Public Address Equipment	5	17	5	4	1	2	0	3	9	12	3	18
(j) Electricity generator (Portable)	15	9	0	7	3	1	0	2	14	7	0	21
(k) Tracing Table	12	9	0	0	3	1	0	2	13	7	1	21
(l) Camera	6	15	7	3	1	1	2	2	7	16	7	12
(m) Silk screen printing equipment	16	6	0	9	1	3	0	2	13	4	3	22

(continued)

Table 30 (continued)

Equipment Facilities	Sponsor-wise Distribution of Colleges													
	Government (N=31)			University (N=6)			Private (N=42)							
	Not hav- ing	Having One More than one	No resp- onse	Not hav- ing	Having One More than one	No resp- onse	Not hav- ing	Having One More than one	No resp- onse	Not hav- ing	Having One More than one	No resp- onse		
(n) Flannel Board	5	11	6	9	1	4	1	4	1	0	5	18	13	6
(o) Bulletin Board	9	10	8	4	0	1	3	2	8	15	12	7		
(p) Study kit	13	4	2	12	3	0	1	2	15	3	1	23		
(q) Audio-Visual Room (Laboratory)	9	19	0	3	0	4	0	2	11	17	1	13		
(r) Exhibition Hall (Museum)	14	12	0	5	1	2	0	3	12	17	1	18		
(s) Dark-Room	9	14	0	8	2	2	0	2	11	17	0	20		
(t) Epistatope	11	11	1	8	3	1	0	2	11	10	0	21		
(u) Vehicle for Transport	15	7	1	8	2	3	0	1	12	5	0	25		

Table 31. Sponsorwise Rank Order of the Availability of
Audio-Visual Equipments and Facilities in the
Teachers Colleges

*Serial order	Rank Order			: Grand Rank Order amongst all
	: Government	: University	: Private	
(a)	3	1	4	3
(b)	4	2	2	2
(c)	20	20	21	21
(d)	6	4	6	6
(e)	1	3	3	1
(f)	2	8	7	7
(g)	5	5	8	5
(h)	11	11	10	11
(i)	8	13	11	10
(j)	18	17	18	19
(k)	16	18	17	16
(l)	7	9	9	9
(m)	21	12	16	17
(n)	9	7	1	4
(o)	10	6	5	8
(p)	17	16	20	20
(q)	12	10	12	12
(r)	15	14	13	14
(s)	13	21	14	13
(t)	14	19	15	15
(u)	19	15	19	18

* The detailed statements of the serial order are given in
Table 30.

7. Radio
8. Bulletin Board
9. Camera
10. Public Address Equipment

The equipments and facilities which have secured lower rank-order indicate their less availability in the colleges under all the three sponsors. Such equipments and facilities are as follows :

1. Phonograph
2. Audio-Visual Room (Laboratory)
3. Dark Room
4. Exhibition Hall
5. Episcopes
6. Tracing Table
7. Silk Screen Printing Equipment
8. Vehicle for Transport
9. Electricity Generator (Portable)
10. Study Kit
11. Overhead Projector

Hence, it can be said that costly and complicated equipments and facilities are not yet available on a large scale in the teachers colleges in India.

Further, it was found necessary to study the present position of research and publication in the audio-visual education.

Research and Publication

For the development of audio-visual education programme, research and publication activity should be taken up seriously

by the colleges. But the data on this item are inadequate and responses from the colleges are very discouraging. Very few colleges are found interested in research but not much has been done in this direction.

Probably the response may be that the field is not well developed for the research work, or there may be lack of the specialised staff for this activity, or there are inadequate funds and other facilities. Further, it may also be possible that there may not be the felt-need for such an activity in this new field of education, as it is in the budding stage. However, this needs detailed study or separate investigation which is beyond the scope of the present research.

Budget

All the activities of training programme need a financial support. It can be said that budget is one of the forces which keep the programme moving. Hence, an effort was made to know the trend of the financial support to this field by including this item in this study. Budget of this department included the expenditure on major aspects of the programme in the questionnaire given in Appendix C. The data of the budget are given headwise in Tables 32 A, B, C, D, E, F, G and H.

Table 32. Sponsorwise Number of Colleges stating the Range of Total Amount Spent during the Last Five Years (1959-1964) under Various Heads

A: EQUIPMENTS AND FACILITIES

Sponsors	Number of Colleges spending Rupees					Total No. of Colleges			
	500 and below	1000	1500	2000	2500	2001 to 2500	Responded	Not Responded	Total
Government	4	4	2	1	0	11	20	31	
University	0	1	1	1	0	3	3	6	
Private	1	2	1	1	1	6	36	42	
Total	5	7	4	3	1	20	59	79	

B: RENTAL OF MOTION PICTURES AND FILMSTRIPS

Sponsors	Number of Colleges spending Rupees					Total No. of Colleges			
	50 and below	100	150	200	250	201 to 250	Responded	Not Responded	Total
Government	2	0	0	2	1	5	26	31	
University	1	0	1	0	0	2	4	6	
Private	4	2	0	0	0	6	36	42	
Total	7	2	1	2	1	13	66	79	

Table 32 continued

C : PURCHASE OF AUDIO-VISUAL AIDS (READY-MADE)

Sponsors	Number of colleges spending Rupees						Total No. of Colleges	
	100 and below	200	400	400 to 500	401 to 500	501 to 1000	Responded	Not Responded
Government	5	1	2	2	2	12	19	31
University	0	0	0	0	0	0	0	6
Private	3	1	2	1	4	11	31	42
Total	8	2	4	3	6	23	56	79

D : Operating Expenses for Equipment, Replacement etc.

Sponsors	Number of Colleges spending Rupees						Total No. of Colleges	
	50 and below	100	150	200	201 to 250	251 to 500	Responded	Not Responded
Government	2	2	1	2	1	8	23	31
University	1	0	1	0	0	2	4	6
Private	2	0	0	0	1	3	39	42
Total	5	2	2	2	2	13	66	79

Table 32 (continued) E : SERVICING EXPENDITURE OF EQUIPMENT AND MATERIALS

Sponsors	Number of colleges spending Rupees						Total No. of Colleges		
	25 and below	50	100	150	200	151 to 200	Responded	Not Responded	Total
Government	3	0	0	2	1	6	25	31	
University	0	1	0	1	0	2	4	6	
Private	0	2	1	0	0	3	39	42	
Total	3	3	1	3	1	11	68	79	

F : PRODUCTION MATERIALS (FOR THE PREPARATION OF AUDIO-VISUAL AIDS)

Sponsors	Number of Colleges spending Rupees						Total No. of Colleges	
	50 and below	100	150	200	201 and above	Responded	Not Responded	Total
Government	4	0	0	0	1	5	26	31
University	1	0	0	0	0	1	5	6
Private	2	1	0	0	0	3	39	42
Total	7	1	0	0	1	9	70	79

Table 32 (continued)

G : AUDIO-VISUAL LIBRARY, BOOKS AND PERIODICALS

Sponsors	Number of Colleges spending Rupees					Total No. of Colleges		
	50 and below	51 to 100	101 to 150	151 to 200	201 and above	Responded	Not Responded	Total
Government	1	0	1	0	1	3	28	31
University	1	0	0	0	0	1	5	6
Private	0	0	0	0	1	1	41	42
Total	2	0	1	0	2	5	74	79

H : RESEARCH AND PUBLICATIONS IN THE FIELD

Sponsors	Number of Colleges spending Rupees					Total No. of Colleges		
	50 and below	51 to 100	101 to 150	151 to 200	201 and above	Responded	Not Responded	Total
Government	0	1	0	0	0	1	30	31
University	0	0	0	0	0	0	6	6
Private	3	3	1	0	0	7	35	42
Total	3	4	1	0	0	8	71	79

(A) Budget for Equipment and Facilities. The data of this item are given in the Table 32 A.

Out of 79 colleges operating this programme 20 colleges (25.31%) responded to this item. Out of these 20 colleges 5 colleges spent rupees 500 and below, while 7 colleges spent between rupees 501 to 1000. The number of colleges gradually reduces towards the higher range of budget. However, it is evident from the data that the maximum provision of budget for this item is rupees 2500 but this amount is reported to be spent by only one college. Referring to the data about the equipment facilities, the rich availability of projectors and other equipment facilities stated previously seems difficult to be procured within this budget. Perhaps, special grants from the Government or donations from the public patrons or gifts from the foreign aids agencies (e.g. T.C.M., F.A.O., U.N.E.S.C.O., U.S.A.I.D. etc.) may be helpful in equipping the colleges.

(B) Rental of Motion Pictures and Filmstrips. Majority of the colleges have not responded to this item. Possibly, they may not be spending any amount for this or may be getting the films and filmstrips rent free for exhibition from different extension agencies. Only 13 colleges responded to this item. The data are given in Table 32 B. It is seen from the data that more number of colleges spent about Rs.50/- for this purpose per year. It indicates that a very few film shows

are arranged to minimise the expenses.

(C) Purchase of Audio-Visual Aids (Ready-Made). Only 23 colleges (29.11%) out of 79 responded to this item. The data are presented in Table 32 C.

It is seen from the data that rupees 100 and below are spent for this by 8 colleges and 6 colleges spent between 401 to 500 rupees. The budget shown for this item seems to be inadequate to cover expenses of audio-visual aids.

(D) Operating Expenses for Equipment, Replacement etc. Only 13 colleges (16.45%) out of 79 responded to this item. The amount spent under this head is very small. It may be possible that the equipments may be handled and operated by the experts with care to minimise such expenses or the equipments may be very rarely used. Such limited budget may not encourage the intensive use of the equipments in training.

(E) Servicing Expenditure of Equipment and Materials. The data about this item are not furnished by majority of the colleges. But from the available data in Table 32 E, it is seen that amount above Rs.100 is spent under this head by very few colleges. It may be concluded that servicing is ignored and equipments are not properly cared.

(F) Production Materials (for the Preparation of Audio-Visual Aids). The data received from nine colleges (11.39%) out of 79 shown in Table 32 F indicate that about Rs.50 are spent

under this head. There are some colleges implementing the objective of production of audio-visual aids and extension services as reported in the Table 3. But, it is surprising how these objective can be fulfilled within this short budget.

(G) Audio-Visual Library, Books and Periodicals. Practically a very few number of colleges have responded to this item. Only 5 colleges (6.32%) out of 79 have given the data as shown in Table 32 G. It does not provide any significant data which may lead to any probable conclusions except the poorest provision of budget for this important head.

(H) Research and Publications. Out of 79 colleges, only eight colleges (10.12%) responded to this item. It is seen from the data in Table 32 H that not more than Rs.150/- is spent by such colleges for research and publications. It is clear that such an important activity is almost neglected.

The data on the following heads are not furnished by the colleges.

- Resource Person's allowances.
- Staff salary and other off-campus activity allowances.
- Repairs and up-keep of the vehicles.
- Staff development (special training in India or abroad).
- Post-graduate department of audio-visual education.

Perhaps, there may be no provision of budget under these

heads in the prevailing conditions in the colleges. However, it is seen from the available data on the items of the budget that insufficient and restricted budget is provided for this field. Hence, progress in this field is hampered.

Suggestions

Even after making an attempt to include an elaborate list of items for inquiry, it is likely that some pertinent aspects might have been overlooked in this study. Hence to make the scope of inquiry wider and deeper, overall opinions and suggestions about the training programme were asked from the respondents as an open-end question.

The data presented in Table 33 represents a few colleges which responded to this item. The suggestions are classified and in seven categories/are ranked in order of preference. It appears that special training of staff is preferred utmost and technical help for minor repairs and servicing equipment are suggested, the least. Equal weightage to audio-visual education, Audio-Visual education workshops, more funds are also suggested by some colleges.

Table 33. Suggestions Given by the Colleges

Rank : Order :	Suggestions	No. of Colleges offering sugg- estions(N=79) :	Cumulative Frequency
1.	There should be specially trained staff in audio-visual education.	12 (15.18)	12
2.	Audio-Visual Education should be given equal weightage as the other subjects in the syllabus and in the examinations.	6 (7.59)	18
3.	Audio-Visual Education workshops and exhibitions should be conducted either by the extension wings or the training colleges annually.	6 (7.59)	24
4.	Enough funds should be made available to the colleges for establishing fully equipped audio-visual department.	4 (5.06)	28
5.	Technical help for minor repairs and servicing of the equipments should be made available.	4 (5.06)	32

(Figures in the parenthesis indicate percentage)

Appraisal of the Training Programme

According to the evaluation rationale discussed in Chapter III, the appraisal or the evaluation of the training programme is one of the three arms of the triangle of the evaluation rationale. This part, was therefore, included on this base in this study. The following major heads are included

in the study.

- Evaluation of the training programme
(Persons and methods involved).
- Evaluation of the trained teachers (Follow-up)
(Methods and objectives of follow-up).

It is gravely regretted that a very few number of colleges are found doing appraisal of their training programmes. Whatever the data obtained from these colleges are found not fully satisfying the requirements of the inquiry. It can safely be concluded from this response that the appraisal of the training programme is yet not taken up by the colleges operating the training programmes in the field. There may be several reasons for this. Firstly, the evaluation of the audio-visual education training programme may not be possible unless the audio-visual education departments are well established and have put-up one or two years' performance in the field. Perhaps a very few colleges fulfil this condition in the prevailing situation. Some audio-visual education departments of the colleges are operating this programme for the last five years or more than five years, but they may not be in a position to furnish the information according to the requirements of the inquiry. However, the available data on the evaluation of the training programme are presented here.

Out of 79 colleges operating the audio-visual education training programme only 4 colleges (5.00%) responded to some of

the items followed by them for the evaluation of their programmes.

Evaluation Procedure : The Training Programme

From the data in Table 34, it is found that the evaluation of the training programme is done in 3 colleges out of 4 colleges by the staff of the audio-visual education department and in one college by the University board. The staff members establish the personal relationship with the trainees and university board interviews the departmental staff and inspects the training programme to have the strong points of the programme and to make suggestions for future improvement in the programme. This can help in the adequate future planning and organisation of the training programme. Further, the details about the follow-up of the trained teachers are also re inquired into.

Table 34. Persons involved and the Methods followed for Evaluation of the Training Programme

Persons or Agency	Methods followed	Number of colleges (N=79) Responded
Staff of the audio-visual education department.	Informal talks with trainees, review meetings of the staff.	3
University Board	Interviews	1
Total		4

Follow-up of the Trained Teachers. The data about the methods of follow-up and the number of teachers followed are given in Table 35. From the data it is found that four colleges do the follow-up programme. Out of these 4 colleges 2 colleges make the follow-up by personal visits and two colleges make it by arranging the conference of the teachers trained in the field by them.

The follow-up of about 35 teachers is done by these four colleges. However, the number of the colleges doing follow-up is very small but it clearly indicates that there is some innovation in this direction. Further, the objectives of doing follow-up were also included in this inquiry.

Table 35. Number of Colleges stating the Methods of Follow-up and the Number of Teachers Followed-Up

Methods of Follow-up	No. of Colleges (N=79) (No. of Students followed up)	Percentage
Personal visit	2 (12)	2.53
Correspondence by mail	0	-
Conferences of the Trained Teachers	2 (23)	2.53
Other methods not Specified	-	-
Total	4 (35)	

Objectives of the Follow-up Programme. The data about the objectives observed by the colleges are given in Table 36.

It is found from the data that the following three objectives are mostly observed by the majority of colleges responded.

- To keep the audio-visual education department informed of the difficulties former trainees encounter on the jobs.
- To maintain continuous contact with the concerned institutions.
- To determine the effectiveness of the training programme in the real situation.
- To provide informations for school pupils, teachers, administrators, Government officials and patrons to aid in better understanding of the objectives, achievements and limitations of the audio-visual education department.

From the above data it can clearly be concluded that the follow-up is done to keep the programme dynamic ^{and} to cater to the needs of the community. The importance of the objectives is shown by arranging them in the descending order of the number of colleges observing them (Table 36).

No further details about the evaluation of the training programme are given by any college. No college has attached any data sheet or the specimen copy of the publication or relevant information in the Appendix provided in the Questionnaire.

Table 36. Rank Order of the Objectives determined by the Colleges for the Follow-up Programme

Rank : Order:	Objectives	:Number of :colleges
1.	To keep the audio-visual education department informed of the difficulties former trainees encounter on the jobs.	.. 4
2.	To maintain continuous contact with concerned institutions.	.. 4
3.	To determine the effectiveness of the training programme in the real situation.	.. 3
4.	To provide informations for school pupils, teachers, administrators, Government officials and patrons to aid in better understanding of the objectives, achievements and limitations of the audio-visual education department.	.. 3
5.	To assess whether the objectives of Audio-Visual Education programme are implemented.	.. 2
6.	To collect the data for guidance and counselling in the practical situation of Audio-Visual Education.	.. 2
7.	To make the satisfactory adjustment in the training programme of Audio-Visual Education in training college to justify the actual needs of the teachers, pupils, administrators and community.	.. 2
8.	To determine the service conditions for the trained teachers with Audio-Visual Education as the special field.	.. 2
9.	To determine the occupational scope for the persons professionally specialised in Audio-Visual Education.	.. 2
10.	To locate occupational opportunities which may be of interest to the present and former trainees.	2
11.	To keep the department of Audio-Visual Education in touch with current occupational opportunities, requirements and trends.	.. 2
12.	To bring employers and trained personnel together for their mutual benefit.	.. 1

It is concluded from the available data about this programme that the very essential part of the training programme, the evaluation, is not yet executed by the colleges except very few colleges reported in the Table 35.

Hence, a readily available check-list for the self-evaluation of the training programmes in audio-visual education may help them to identify their position in the prevailing conditions in the country and may provide guidelines for future development of programmes. Therefore, the efforts are made to develop such an instrument for evaluation in the following chapter.
